Memorandum

Date: **July 18**, *2003* Telephone: (916)651-8839

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DOCKET

01-AFC-17

DATE JUL 18 2003

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Subject: INLAND EMPIRE ENERGY CENTER PROJECT SUPPLEMENTAL TESTIMONY AND ADDENDUM TO THE STAFF ASSESSMENT

Attached please find staff's Supplemental Testimony and Addendum to the May 23, 2003 Final Staff Assessment (FSA) for the Inland Empire Energy Center (IEEC) Project (01-AFC-17). As a result of the FSA workshops held on July 8 and 9, 2003, this Addendum contains substantial revisions to the Conditions of Certification presented throughout the FSA.

This filing represents all Conditions of Certification within the FSA. Where there are changes, they are shown as <u>underlined</u> new text and strike out text to be removed. Where no changes were proposed, those Conditions appear as they did within the FSA (Land Use, Socioeconomics, and Waste Management). It should be noted that no Conditions of Certification were proposed in the FSA for Alternatives, Power Plant Efficiency, and Power Plant Reliability. Staff's intent with this filing is to provide a complete list of FSA Conditions of Certification that all parties can refer to in future proceedings.

Many of the revisions to the conditions of certification reduce the time limits for submitting various plans and other work products for review. Those changes were proposed by the applicant. Staff has agreed to reduce those time limits with the understanding that any underlying requirement that an approval be granted before a particular action can take place (i.e., site mobilization, construction or operation) is unaffected by the change. The applicant bears the risk that the review and approval cannot be accomplished within the specified time frame and the corresponding risk of delay of its project. At the July 8th workshop, the Applicant's representatives confirmed Staff's understanding.

Attachment

cc: Docket 01-AFC-17

Proof of Service

PROOF OF SERVICE (REVISED 6-19-6 3 FILED WITH ORIGINAL MAILED FROM SACRAMENTO ON 2-10-0

K.A.H.

AIR QUALITY

This staff testimony responds to the applicant's testimony filed for Inland Empire Energy Center on July 10, 2003 (Applicant's Testimony). It supplements the Final Staff Assessment filed in May 2003. The applicant provided testimony on the affected environment, the project's air quality impacts, the project's ability to comply with LORS, and the proposed Conditions of Certification. Staff does not agree with the applicant's interpretation of LORS compliance and some of the changes to the Conditions of Certifications proposed by the applicant. This testimony provides more detailed information below to clarify staff's position. The conclusions and recommendations of the Final Staff Assessment remain unchanged by the following new information.

EXISTING AIR QUALITY

New, more-stringent state-level standards for PM_{10} and $PM_{2.5}$ became effective on July 5, 2003. In light of the more-stringent standards, staff believes that the applicant's portrayal of ambient conditions is unrealistically optimistic. The applicant claims that "…peak PM_{10} concentrations and the number of annual violations of the state standard have declined by approximately 20 % over the last twelve years" (Applicant's Testimony, p. 5.1-5). Staff does not dispute that gains have been made, but conditions vary year-by-year, depending largely on meteorology. New data shows that there were as many days over the previous state standard in 2002 as in 1992. Annual average concentrations have been improving, but they remain persistently above the state standards, especially when compared with the new state standard (20 μ g/m³ annual average PM_{10}). Table 1 provides more information on background concentrations monitored by CARB and SCAQMD at Perris. This table shows that annual average PM_{10} concentrations have hovered over double the new state standard since 1998.

Concentrations of $PM_{2.5}$ also persistently exceed the new state standard (12 µg/m³ annual average $PM_{2.5}$). The applicant claims that "...the trend in $PM_{2.5}$ levels is steadily downward through the 1990s" (Applicant's Testimony, p. 5.1-6), although no evidence of this trend is offered. CARB-certified data for $PM_{2.5}$ have only been available since 1999. Air Quality Table 3 in the Final Staff Assessment shows that annual average $PM_{2.5}$ concentrations have remained over double the new state standard, without obvious improvement, throughout the duration of available data.

Table 1 Historic PM₁₀ Monitoring Data from Perris

Year	Days Over State Standard	Annual Average	3-yr Average	24-hour Average Maximum
	(days)	(µg/m³)	(µg/m³)	(µg/m³)
2002	144	45.1	42	100
2001	96	40.8	44	86
2000	78	41.1	42	87
1999	180	50.0	43	112
1998	79	34.5	40	98
1997	114	44.5	44	139
1996	120	39.9	44	87
1995	132	48.3	48	145
1994	156	45.2	47	112

1993	162	50.3	48	131
1992	144	44.4	51	115
1991	156	48.8	56	113
1990	192	58.7	58	250
1989	234	61.2	55	187
1988	210	55.0		164

Source: http://www.arb.ca.gov/adam/welcome.html, accessed July 2003.

PROJECT CONSTRUCTION IMPACTS

Applicant and staff agree that construction of the IEEC would contribute to existing violations of the PM_{10} standards in the vicinity of project construction work. The most severe PM_{10} impacts would occur near the fence-line, early in the construction phases, during site preparation. For later phases of construction, fewer activities would have the potential to generate dust.

Staff disagrees with the applicant's interpretation of the impact analysis during construction and the applicant's proposal to delete **AQ-SC5** and **AQ-SC6**. The applicant's testimony claims that "... the IEEC does not cause a new violation of the state 24-hour and annual average PM_{10} standards..." (Applicant's Testimony, p. 5.1-7). There is evidence in FSA Air Quality Tables 9 and 13 to support this claim for the main project site. Staff, however, disagrees with the claim because FSA Air Quality Table 10 shows that construction could cause a new localized and short-term violation of the 24-hour PM_{10} standard at the compressor station site.

Avoiding a new violation of the state 24-hour PM₁₀ standard at the main project site depends on many factors that would be within the project owner's control. Implementing the aggressive dust control strategies identified by the applicant, and proposed in the staff Conditions of Certification (**AQ-SC1** through **AQ-SC4**), would provide the greatest measure of dust control. These conditions are routinely recommended by staff, regardless of existing conditions or proximity of sensitive land uses. Staff recommends new clarifications for these conditions as set forth in the revised conditions below.

Staff continues to believe that it is necessary to assure compliance with the proposed construction conditions through an Ambient Air Monitoring Program (AAMP, **AQ-SC5**). The nearest rural residences are approximately 600 feet from portions of the IEEC site, and the Romoland Elementary School is approximately 0.34 miles from the site. The AAMP would assure compliance with the other proposed construction conditions and provide a measure of protection for these nearby sensitive receptors.

The applicant proposes deleting **AQ-SC5**, mainly on the premise that other licensing cases have not been subject to similar requirements. This premise is false because air quality staff has recommended similar measures for the Los Esteros Critical Energy Facility (01-AFC-12), Russell City Energy Center (01-AFC-7), and the San Joaquin Valley Energy Center (01-AFC-22), a facility whose nearest residential receptor is approximately 1,000 feet from the site. Similar to these previous projects, staff continues to believe that data from the real-time monitoring instruments would provide useful information to the CPM and the project owner in assessing the effectiveness of

the measures and determining whether more aggressive application of those measures is necessary. Staff expects a description of how the project owner, through the on-site Air Quality Construction Mitigation Manager, will apply the data as part of the "[d]escription of how the monitors will be used to assess the effectiveness of the mitigation measures implemented under the construction mitigation plan" required by **AQ-SC5**.

Staff also believes it is important that the IEEC project owner adhere to the 10-hour-day work schedule that was used by the applicant to develop the impact assessment (**AQ-SC6**). Failure to adhere to this schedule could increase the quantity of daily emissions of dust. For example, a 20-hour work day would double the emissions and the 48 μ g/m³ impact shown in FSA Air Quality Table 9. Staff believes that the project owner should not be offered this flexibility because such a schedule would almost certainly result in a new violation of the 50 μ g/m³ 24-hour standard. Because of the persistent PM₁₀ problems in the region, the high levels of PM₁₀ that are predicted to occur during construction, and the proximity of the sensitive receptors, staff disagrees with the proposed deletion of **AQ-SC5** and **AQ-SC6**.

COMPLIANCE WITH LORS

Staff proposed various conditions (especially **AQ-SC9**, **AQ-SC10**, and **AQ-SC16**) to ensure compliance with LORS and the conditions of the SCAQMD FDOC, and the applicant proposed revisions generally supporting the conditions. Staff generally agrees with the clarifications recommended by the applicant, which are shown in the revised conditions below.

Compliance with requirements for offsets would be satisfied for PM_{10} and SOx through the Priority Reserve program and for CO and VOC through emission reduction credits (ERCs). The applicant has acknowledged that road paving strategies to offset PM_{10} have not been fully evaluated by SCAQMD or Energy Commission staff and that the applicant would need to apply for an amendment to the project if road paving would be used for offsets (Pre-Hearing Conference Transcript, June 24, 2003, p.10, line 10-20). Staff agrees that the applicant would comply with the offset requirements for these pollutants.

Staff continues to disagree with the applicant's assertion that it has identified sufficient RECLAIM Trading Credits (RTCs) to satisfy the Warren-Alquist Act requirements for NOx offsets. The applicant believes that this requirement has been satisfied and that staff confuses emission reduction credits and RTCs (Applicant's Testimony, p. 5.1-12).

The Warren-Alquist Act, at Public Resources Code subsection 25523(d)(2), provides:

The commission may not find that the proposed facility conforms with applicable air quality standards pursuant to paragraph (1) unless the applicable air pollution control district or air quality management district certifies, prior to the licensing of the project by the commission, that complete emissions offsets for the proposed facility have been identified and will be obtained by the applicant within the time required by the district's rules The commission shall require as a condition

of certification that the applicant obtain any required emission offsets within the time required by the applicable district rules, consistent with any applicable federal and state laws and regulations, and prior to the commencement of the operation of the proposed facility.

Prior to its recent amendment, this subsection required that offsets be both identified and obtained prior to licensing by the commission. While no longer requiring that the offsets be obtained prior to Commission licensing, current law still requires that they be identified prior to that event. This is clear from the language of the statute and use of the past tense: **have been**. Use of the term: **offsets** importantly does not specify the mechanism of offset. The offset could occur by any type of emission reduction credit or other traded credit. Staff applies this criteria uniformly to all projects that are required by local air districts to offset emission increases.

Nearly every case before the Commission that causes an emission increase must somehow offset the increase. Each air district has a unique method of managing emission increases via a version of the New Source Review (NSR) program, but the requirement to offset new emission increases is common among all NSR programs. In the SCAQMD, the offset requirement can be completed using different mechanisms depending on the pollutant.

The RECLAIM program is a "cap-and-trade" emission management strategy that is clearly different than a typical "command-and-control" program where ERCs are the currency. While RTCs are somewhat different from ERCs, Section 25523, however, does not distinguish between them for its purposes.

The RTC is the currency of *offset* for RECLAIM sources. NSR requirements for RECLAIM in SCAQMD Rule 2005(b)(2)(A) apply to the IEEC project. The offset requirement in the RECLAIM rule reads:

(b)(2) The Executive Officer shall not approve the application for a Facility Permit authorizing operation of a new or relocated facility, unless the applicant demonstrates that: (A) the facility holds sufficient RECLAIM Trading Credits to offset the total facility emissions for the first year of operation, at a 1-to-1 ratio;...

The applicant suggests that, because of the differences between RTCs and ERCs, the requirements of Public Resources Code subsection 25523(d)(2) might only apply to ERCs (Applicant's Testimony, pp. 5.1-12 to 14). Staff strongly disagrees with this line of reasoning. The statute clearly applies to any type of offset, regardless of form. The form of offset for NOx is the RTC [SCAQMD Rule 2005(b)(2)(A)], and the form of offset for the other pollutants is the ERC. In either case, the applicant must participate in some type of market-controlled transaction to eventually secure the credit and offset the proposed emission increase.

When determining whether new emission increases will be properly offset per Public Resources Code subsection 25523(d)(2), staff reviews the applicant's offset strategy. In a typical "command-and-control" market, this involves a review of the ERCs that the applicant intends to surrender. If sufficient and suitable ERCs have been identified,

then compliance with this requirement would be found. For the RECLAIM program, staff examines whether the applicant has identified sufficient RTCs for the first year of the project's new emissions. If the applicant holds sufficient RTCs, then this requirement would be satisfied. This requirement could also be satisfied by the applicant holding binding agreements to eventually acquire the RTCs from third-party owners. Once the RTC is transferred to the project, the RECLAIM program ensures that the project's emission increase is offset.

The IEEC applicant has not demonstrated an effort to acquire RTCs beyond the small amount that it currently owns, nor has it demonstrated an effort to enter into agreements to eventually acquire the RTCs. The SCAQMD does not require RTCs to be held until the project is ready for operation. Because of the timing of the SCAQMD requirement, staff agrees with the applicant that the project is presently not in violation of the SCAQMD rule (Applicant's Testimony, p. 5.1-14). The rule doesn't require that anything be done at this time. The project, however, is not in compliance with Public Resources Code subsection 25523(d)(2) because a sufficient amount of RTCs have not been identified as required under that statute.

IEEC is unique among recent cases in that it has identified only the universe of available RTCs in the regional marketplace, and has specifically identified less than 10 percent of the SCAQMD requirement. Staff has recently approved other projects that held or had agreements to acquire very close to 100 percent of the first-year RTCs. At the time of the Commission decision for the recent Magnolia Power Plant case (March 5, 2003, 01-AFC-6), the applicant demonstrated that it had agreements to purchase all necessary RTCs. The applicant for the Malburg Generating Station (Vernon) project had obtained all offsets prior to the Commission decision on that case (May 28, 2003, 01-AFC-25). The applicant for the El Segundo Power Redevelopment Project (00-AFC-14) identified approximately 90 percent of the required RTCs before the Final Staff Assessment.

In summary, Public Resources Code subsection 25523(d)(2) requires identification of complete emission offsets, the mechanism for ensuring NOx offsets is the RTC, staff normally requires projects to specifically identify sufficient offsets that would be obtained, and the IEEC applicant has not identified sufficient RTCs. For these reasons, staff continues to believe that the IEEC applicant has not satisfied the requirements of the statute for NOx offsets and cannot recommend approval of the AFC.

The recommended Conditions of Certification, revised to reflect changes that were agreed to by staff at the July 8, 2003 workshop, are shown below.

CONDITIONS OF CERTIFICATION

Staff agrees to the following changes to the Conditions of Certification:

AIR QUALITY Table 18 correlates the District proposed conditions from the Final Determination of Compliance to the staff proposed Conditions of Certification. It is staff's opinion that this table is necessary due to the complex nature of the District's

permitting system. The table shows the staff conditions of certification in the far left column and the corresponding District condition in the far right column. The middle column is a brief description of the subject of each proposed condition.

Air Quality Table 18 Commission Staff ~ District Conditions of Certification

Commission	Notes	District
	CEC Staff Conditions (SC)	-
Staff Condition	ns – Construction	
AQ-SC1	Air Quality Construction Mitigation Manager requirement.	NA
AQ-SC2	Construction Mitigation Plan requirement.	NA
AQ-SC3	Monthly Compliance Report requirement.	NA
AQ-SC4	Visible Emissions Limitation.	NA
AQ-SC5	Ambient Air Monitoring Program requirement.	NA
AQ-SC6	Fugitive dust daily schedule limitation.	NA
Staff Conditio	ns - Operation	
AQ-SC7	Air permit modification notification and approval.	NA
AQ-SC8	Quarterly Operation Report requirement.	NA
AQ-SC9	Requires that the project owner provide offset documentation.	NA
AQ-SC10	Requires operation in compliance with Priority Reserve rule.	NA
AQ-SC11	Requires cooling tower water testing to ensure emission estimates for the cooling tower are not underestimated.	NA
AQ-SC12	Specifies cooling tower PM ₁₀ emission limit (79 lb/day).	NA
AQ-SC13	Restricts simultaneous commissioning of turbines.	NA
AQ-SC14	Restricts simultaneous startup of turbines.	NA
AQ-SC15	Restricts sulfur oxides emissions.	NA
AQ-SC16	Equipment emission limitsdescription.	NA
	District Conditions	
Facility Condi	tions	
AQ-1	Opacity limitation.	F9-1
AQ-2	Diesel fuel sulfur content limit.	F14-1
AQ-3	Fuel oil (inc. diesel) sulfur content limit (eff. date 6/1/2004).	F14-2
AQ-4	Accidental release requirements.	F24-1
Gas Turbine,	Duct Burner, and SCR Conditions	
AQ-5	Ammonia injection monitoring.	12-1
AQ-6	SCR temperature monitoring.	12-2
AQ-7	SCR pressure monitoring.	12-3
AQ-8	Initial source testing requirement for the following pollutants: NO _x , CO, SO _x , ROG, PM ₁₀ , ammonia.	29-1
AQ-9	Ongoing (every 3 years) source testing requirement for the following pollutants: SO _x , ROG and PM ₁₀ .	29-2
AQ-10	Ongoing source testing requirement for ammonia. Quarterly for first 12 months and annually thereafter.	29-3
AQ-11	Source test requirements in addition to 29-1.	40-1
AQ-12	Natural gas sulfur limit.	61-1
AQ-13	Monthly emissions limits.	63-1
AQ-14	Record keeping requirement for natural gas fuel use.	67-1
AQ-15	CEMS CO monitoring and reporting requirements	82-1
AQ-16	CEMS NO _x monitoring and reporting requirements	82-2

Commission	Notes	District
AQ-17	Exception for NO _x limit (2.0 ppm) during commissioning,	99-1
	startup, and shutdown periods. Limit on commissioning	
	(636 hours). Limit on startup/ shutdown (4 hours per day).	
AQ-18	Exception for CO limit (3.0 ppm) during commissioning,	99-2
	startup, and shutdown periods. Limit on commissioning	
	(636 hours). Limit on startup/ shutdown (4 hours per day).	
AQ-19	Exception for NO _x limit (14.03 lbs/MMCF) during interim	99-3
	period not to exceed 12 months from initial startup date.	
AQ-20	Ammonia injection and SCR temperature monitoring calculation requirement.	179-1
AQ-21	SCR pressure monitoring calculation requirement.	179-2
AQ-22	Hourly NO _x limit (2.0 ppm, 1 hour average).	195-1
AQ-23	Hourly CO limit (3.0 ppm, 1 hour average or 4.0 ppm, 1	195-1
AQ-23	hour average).	195-2
AQ-24	Hourly VOC limit (2.0 ppm, 1 hour average).	195-3
AQ-25		195-6
AQ-25 AQ-26	Hourly ammonia limit (5 ppm, 1 hour average).	232-1
AQ-26 AQ-27	CEMS-Continuous NH ₃ monitoring requirement.	296-1
AQ-27 AQ-28	Requires IEEC to retain adequate RTCs for operation. Combustion contaminant emissions limitation.	327-1
NA	Requires IEEC to operate in accordance with mitigation	193-1
Ailiam. Da	measures stipulated in the final commission decision.	
	iler and SCR Conditions	T
AQ-29	Ammonia injection monitoring.	12-1
AQ-30	SCR temperature monitoring.	12-2
AQ-31	SCR pressure monitoring.	12-3
AQ-32	Initial source testing requirement for the following pollutants: NO _x , CO, SO _x , ROG, PM ₁₀ , ammonia.	29-1
AQ-33	Ongoing source testing requirement for ammonia.	29-3
	Quarterly for first 12 months and annually thereafter.	
AQ-34	Source test requirements in addition to 29-1.	40-2
AQ-35	Natural gas sulfur limit.	61-1
AQ-36	Monthly emissions limits.	63-2
AQ-37	CEMS CO monitoring and reporting requirements.	82-3
AQ-38	CEMS NO _x monitoring and reporting requirements.	82-4
AQ-39	Exception for NO _x limit (8.36 lbs/MMCF) during interim	99-4
	period not to exceed 12 months from initial startup date.	
AQ-40	Ammonia injection and SCR temperature monitoring	179-1
	calculation requirement.	
AQ-41	SCR pressure monitoring calculation requirement.	179-2
AQ-42	Hourly NO _x limit (7 ppm, 1 hour average).	195-4
AQ-43	Hourly CO limit (50 ppm, 1 hour average).	195-5
AQ-44	Hourly ammonia limit (5 ppm, 1 hour average).	195-7
AQ-45	CEMS-Continuous NH ₃ monitoring requirement.	232-2
AQ-46	Requires IEEC to retain adequate RTCs for operation.	296-1
NA	Requires IEEC to operate in accordance with mitigation	193-1
Emorgana: C	measures stipulated in the final commission decision.	
	tenerator and Fire Pump Engine Conditions	1 1
AQ-47	Engine annual operating limit (200 hours).	1-1
AQ-48	Operating time meter requirement.	12-4
AQ-49	Fuel use meter requirement.	12-5
AQ-50	Record keeping requirement.	67-2
	prage Tank Conditions	
AQ-51	Venting limitation.	144-1
AQ-52	Pressure relief valve setting (25 psig).	157-1

Commission	Notes	District		
Organic Mate	Organic Materials Conditions			
AQ-53	Restricts use of cleaning equipment.	23-1		
AQ-54	Restricts use of architectural applications.	67-3		

NA - not applicable.

STAFF CONDITIONS

<u>Staff Conditions – Construction</u>

AQ-SC1 The project owner shall fund all expenses for an on-site Air Quality Construction Mitigation Manager (AQCMM) who shall be responsible for maintaining compliance with conditions AQ-SC2 through AQ-SC6 for the entire project site and linear facility construction. The on-site AQCMM may delegate responsibilities identified in Conditions AQ-SC1 through AQ-SC6 to one or more air quality construction mitigation monitors. The on-site AQCMM shall have access to areas of construction of the project site and linear facilities, and shall have the authority to appeal to the CPM to have the CPM stop halt any or all construction activities as warranted by applicable construction mitigation conditions. The on-site AQCMM, and any air quality construction mitigation monitors responsible for compliance with the requirements of AQ-SC4, shall have a current certification by the California Air Resources Board for Visible Emission Evaluation (U.S. EPA Method 9) prior to the commencement of ground disturbance. The AQCMM may have other responsibilities in addition to those described in this condition. The onsite AQCMM shall not be terminated without written consent of CPM.

<u>Verification:</u> At least 60 days prior to the start of ground disturbance, the project owner shall submit to the CPM, for approval, the name, current CARB Visible Emission Evaluation certificate, and contact information for the on-site AQCMM and air quality construction mitigation monitors.

AQ-SC2 The project owner shall provide a construction mitigation plan, for approval, which shows the steps that will be taken, and reporting requirements, to ensure compliance with conditions AQ-SC3 and AQ-SC4.

<u>Verification:</u> At least 60 days prior to start any ground disturbance, the project owner shall submit to the CPM, for approval, the construction mitigation plan. <u>The CPM will notify the project owner of any necessary modifications to the plan within 30 days from the date of receipt. Otherwise, the plan shall be deemed approved.</u>

- **AQ-SC3** The on-site AQCMM shall submit to the CPM, in the Monthly Compliance Report (MCR), a construction mitigation report that demonstrates compliance with the following mitigation measures:
 - a) All unpaved roads and disturbed areas in the project and linear construction sites shall be watered until sufficiently wet for every four hours of construction activities, or until sufficiently wet to comply with the dust mitigation objectives of Condition AQ-SC4. The frequency of watering can be reduced or eliminated during periods of precipitation.
 - b) No vehicle shall exceed 15 miles per hour within the construction site.

- c) The construction site entrances shall be posted with visible speed limit signs.
- d) All construction equipment vehicle tires shall be washed or cleaned free of dirt prior to entering paved roadways.
- e) Gravel ramps of at least 20 feet in length must be provided at the tire washing/cleaning station.
- f) All entrances to the construction site shall be <u>graveled or treated</u> with <u>water or dust soil stabilization compounds</u>.
- g) Construction vehicles must enter the construction site through the treated entrance roadways.
- h) Construction areas adjacent to any paved roadway shall be provided with sandbags to prevent run-off to the roadway.
- All paved roads within the construction site shall be swept twice daily when construction activity occurs.
- At least the first 500 feet of any public roadway exiting from the construction site shall be swept twice daily when construction activity occurs.
- k) All soil storage piles and disturbed areas that remain inactive for longer than 10 days shall be covered, or be treated with appropriate dust suppressant compounds.
- All vehicles that are used to transport solid bulk material on public roadways and that have potential to cause visible emissions shall be provided with a cover, or the materials shall be sufficiently wetted and loaded onto the trucks in a manner to provide at least one foot of freeboard.
- m) Wind erosion control techniques, such as windbreaks, water, chemical dust suppressants, and vegetation, shall be used on all Where appropriate, construction areas that may be disturbed-shall be equipped with windbreaks at the windward sides prior to any ground disturbance.

 The Any windbreaks used shall remain in place until the soil is stabilized or permanently covered with vegetation.
- n) Any construction activities that <u>ean-may</u> cause fugitive dust <u>in excess of the visible emission limits specified in Condition AQ-SC4</u> shall cease when the wind exceeds 25 miles per hour <u>unless water</u>, <u>chemical dust suppressant</u>, or other measures have been applied to reduce dust to the limits set forth in AQ-SC4.
- o) <u>Diesel Fired Engines</u>
 - (1) All diesel-fueled engines used in the construction of the facility shall be fueled only with ultra-low sulfur diesel, which contains no more than 15 ppm sulfur.

- (2) All diesel-fueled engines used in the construction of the facility shall have clearly visible tags issued by the on-site AQCMM that shows the engine meets the conditions set forth herein.
- (3) All large construction diesel engines, which have a rating of 50 hp or more, shall meet, at a minimum, the Tier 1 ARB/EPA certified standards for off-road equipment unless certified by the on-site AQCMM that a certified engine is not available for a particular item of equipment. All large construction diesel engines, which have a rating of 50 hp or more that do not have an EPA Tier 1 particulate standard (50 to 175 hp engines) and do not meet Tier 2 particulate standards, shall be equipped with catalyzed diesel particulate filters (soot filters), unless certified by engine manufacturers or the on-site AQCMM that the use of such devices is not practical for specific engine types. All large construction diesel engines that have a rating of 100 hp or more, shall meet, at a minimum, the 1996 CARB or U.S. EPA certified standards for off-road equipment.
- q) All large construction diesel engines, which have a rating of 100 hp or more, shall be equipped with catalyzed diesel particulate filters (soot filters), unless certified by engine manufacturers or the on-site AQCMM determines that the use of such devices is not practical for specific engine types.
- r) All diesel-fueled engines used in the construction of the facility shall have visible tags issued by the on-site AQCMM that shows the engine meets the conditions AQ-SC3(p) and AQ-SC3(q) above.

<u>Verification:</u> In the MCR, the project owner shall provide the CPM a copy of the construction mitigation report and any diesel fuel purchase records, which demonstrate compliance with condition **AQ-SC3**.

AQ-SC4 No construction activities are allowed to cause visible <u>dust_emissions</u> at or beyond the project site fenced property boundary <u>or any adjacent lands owned by the applicant</u>. No construction activities are allowed to cause visible <u>dust_plumes</u> that exceed 20 percent opacity at any location on the construction site. No construction activities are allowed to cause any visible <u>dust_plume</u> in excess of 200 feet beyond the centerline of the construction of linear facilities.

<u>Verification:</u> The on-site AQCMM shall conduct a visible emission evaluation at the construction site fence line, or 200 feet from the center of construction activities at the linear facilities, each time he/she sees excessive fugitive dust from the construction or linear facility site. The records of the visible emission evaluations shall be maintained at the construction site and shall be provided to the CPM in the MCR.

- AQ-SC5 The project owner shall prepare and implement an Ambient Air Monitoring Program (AAMP) to measure PM₁₀ emissions during excavation, earthmoving and grading activities. The project owner shall submit the AAMP to the CPM for review and approval. The AAMP shall include, at a minimum, the following:
 - 1. The use of real-time PM₁₀ monitoring instruments;

- 2. The simultaneous use of upwind and downwind monitors continuously during these activities:
- Description of how the monitors will be used to assess the effectiveness of the mitigation measures implemented under the construction mitigation plan, including assessing the potential need for monitoring multiple activities on site simultaneously;

<u>Verification:</u> The AAMP shall be included as part of the construction mitigation plan required by condition **AQ-SC2**. Monitoring records, including monitoring data from all upwind and downwind monitors, and records of dust suppression measures implemented, shall be maintained on-site throughout construction and shall be made available to the CPM upon request. A summary of the monitoring records and the dust suppression activities shall be included in each MCR. Any changes to the AAMP or associated protocols require approval from the CPM.

AQ-SC6 During site mobilization, ground disturbance, and grading activities, the project owner shall limit the fugitive dust causing activities (i.e. scraping, grading, trenching, or other earth moving activities) to a ten-hour per day schedule.

<u>Verification:</u> The project owner shall provide records of compliance as part of the MCR.

Staff Conditions – Operation

AQ-SC7 The project owner shall submit to the CPM for review and approval any modification proposed by either the project owner or issuing agency to any project air permit. The project owner shall submit to the CPM any modification to any permit proposed by the District or EPA, and any revised permit issued by the District or EPA, for the project.

<u>Verification:</u> The project owner shall submit the <u>any</u> proposed air permit modification to the CPM within five working days of its submittal <u>either by 1) the project owner to an agency, or 2) receipt of proposed modifications from an agency. The project owner shall submit all modified air permits to the CPM within 15 days of their receipt.</u>

AQ-SC8 The project owner shall submit to the CPM and District Air Pollution Control Officer (APCO) Executive Officer Quarterly Operation Reports, no later than 30 days following the end of each calendar quarter, that include operational and emissions information as necessary to demonstrate compliance with Conditions AQ-SC11, AQ-SC12, AQ-SC14, AQ-SC15, and AQ-1 through AQ-54, as applicable. The Quarterly Operation Report will specifically note or highlight incidences of noncompliance.

<u>Verification:</u> The project owner shall submit the Quarterly Operation Reports to the CPM and APCO no later than 30 days following the end of each calendar quarter.

AQ-SC9 The project owner shall provide emission reduction credits to offset turbine, duct burner, auxiliary boiler, and emergency equipment NOx, CO, VOC, SOx, and PM₁₀ emissions in the form and amount required by the District.

RECLAIM Trading Credits (RTCs) shall be provided for NOx as necessary to

demonstrate compliance with **AQ-27** and **AQ-46**. Traditional eEmission reduction credits (ERCs) shall be provided for CO (823 lb/day, includes offset ratio of 1.2) and VOC (340 lb/day, includes offset ratio of 1.2). Emission reduction credits for SOx (81 lb/day) and PM₁₀ (504 lb/day) shall be obtained from the SCAQMD Priority Reserve.

The project owner shall surrender the ERCs for CO and VOC <u>from among</u> those that are listed in the table below or a modified list, as allowed by this condition. If additional ERCs are submitted, the project owner shall submit an updated table including the additional ERCs to the CPM. The project owner shall request CPM approval for any substitutions, modifications, or additions of credits listed.

The CPM, in consultation with the District, may approve any such change to the ERC list provided that the project remains in compliance with all applicable laws, ordinances, regulations, and standards, the requested change(s) will not cause the project to result in a significant environmental impact, and the District confirms that each requested change is consistent with applicable federal and state laws and regulations. The CPM may also consult the U.S. EPA to determine compliance of credits.

<u>Pollutant</u>	Quantity	(units)	ERC# or Offset Strategy	
NOx	38,234	lb	2005-2010, Coastal, Zone 1	
NOx	452,359	lb	RTCs not yet identified.	
CO	677	lb/day	#AQ003178	
CO	144	lb/day	#AQ004233	
CO	3	lb/day	#AQ004222	
CO	2	lb/day	#AQ004417	
VOC	340	lb/day	#AQ003069	
SOxPM10	504	lb/day	Through Priority Reserve.	
PM10SOx	81	lb/day	Through Priority Reserve.	

<u>Verification:</u> The project owner shall submit to the CPM records showing that the project's offset requirements have been met 15 days prior to initiating construction for Priority Reserve credits, and 30 days prior to turbine first fire for traditional ERCs. If the CPM approves a substitution or modification to the list of ERCs, the CPM shall file a statement of the approval with the project owner and commission docket. The CPM shall maintain an updated list of approved ERCs for the project.

AQ-SC10 If the project owner uses Priority Reserve Credits to satisfy District ERC requirements, the The project owner shall comply with all applicable requirements of SCAQMD Rule 1309.1 governing the use of such credits.

Note: Nothing in this condition shall waive any applicable the requirements of demonstrate that the equipment is fully and legally operational at the rated capacity within three years of the Permit to Construct issuance date or Energy Commission certification, whichever is later, unless extended in writing by the AQMD Executive Officer, or otherwise the Priority Reserve ERCs shall revert back to the AQMD Priority Reserve account and the project owner shall not

operate this equipment until sufficient substitute ERCs are provided by the project owner to the AQMD. No extension by the AQMD shall be effective to allow the project owner to extend the commencement of construction beyond the date five years after the effective date of the Energy Commission's decision approving the project unless an extension of that deadline is granted as provided in Section 1720.3 of the Commission's regulations.

<u>Verification:</u> Within 15 days of becoming operational, the project owner shall submit to the District and CPM documentation substantiating that the <u>requirements of SCAQMD Rule 1309.1 and Section 1720.3 of the Commission's regulations have been metdate of becoming fully operational is within three years of obtaining the Permit to Construct; or shall otherwise provide the required ERCs to the District, and documentation of these ERCs to the CPM prior to becoming operational.</u>

AQ-SC11 The project owner shall perform quarterly cooling tower recirculating water quality testing, or shall provide for continuous monitoring of conductivity as an indicator, for total dissolved solids content. The project owner shall also provide a flow meter to determine the daily cooling tower circulating water flow.

<u>Verification:</u> The project owner shall submit to the CPM cooling tower recirculating water quality tests <u>or a summary of continuous monitoring results</u> and daily recirculating water flow in the Quarterly Operation Report (**AQ-SC8**). <u>If the project owner uses continuous monitoring of conductivity as an indicator for total dissolved solids content, the project owner shall submit data supporting the calibration of the conductivity meter and the correlation with total dissolved solids content at least once each year in a Quarterly Operation Report (**AQ-SC8**).</u>

AQ-SC12 The cooling tower daily PM₁₀ emissions shall be limited to 79 lb/day. The cooling tower shall be equipped with a drift eliminator to control the drift fraction to 0.0005 percent of the circulating water flow. The project owner shall estimate daily PM₁₀ emissions from the cooling tower using the water quality testing data or continuous monitoring data and daily circulating water flow data collected on a quarterly basis.

<u>Verification:</u> The project owner shall submit to the CPM daily cooling tower PM₁₀ emission estimates in the Quarterly Operation Report (**AQ-SC8**).

AQ-SC13 The project owner shall minimize emissions of carbon monoxide and nitrogen oxides from the gas turbines and duct burners to the maximum extent possible during the commissioning period. Commissioning tests for one gas turbine shall not be conducted simultaneously with commissioning tests for the other.

<u>Verification:</u> See the verification for Condition **AQ-17**.

AQ-SC14 The project owner shall limit emissions during startup periods so that startup of a gas turbine shall only occur when the other turbine is not in a startup mode.

Verification: See the verification for Condition **AQ-17**.

AQ-SC15 The gas turbines and duct burners shall be fired on natural gas that results in emissions of less than 1.8 lb/hr SOx for each gas turbine and duct burner pair, averaged over three hours.

<u>Verification:</u> The project owner shall compile hourly SOx emissions data for each gas turbine and duct burner pair. The hourly emission data <u>may-shall</u> be calculated using <u>the emission factor specified in Condition AQ-13 fuel use data and an emission factor derived from continuous fuel sulfur content monitoring data from the gas supplier, or if such data is not available, the monthly fuel sulfur content data determined using recognized ASTM method(s). The emissions data shall be submitted to the CPM in the Quarterly Operation Report (AQ-SC8).</u>

AQ-SC16 The project owner shall install and operate the equipment so that it does not exceed the following-emission limits set forth in the Equipment Description portion of Section H of the facility permit issued by the District. The current Equipment Description, as shown in the Addendum to the Final Determination of Compliance, is attached as Attachment Air Quality 1 – AQ-SC16, Equipment Description.

Gas Turbines, Duct Burners, and SCR Units

- •2.0 ppmv NOx emission limit, as in AQ-17 and AQ-22
- •3.0 ppmv or 4.0 ppmv CO emission limit, as in AQ-18 and AQ-23
- •2.0 ppmv ROG emission limit, as in AQ-24
- •5 ppmv NH3 emissions limit, as in AQ-25
- •14.03 lbs/mmscf NOx emission limit, as in AQ-19

Auxiliary Boiler and its SCR unit

- •8.36 lbs/mmscf NOx emission limit, as in AQ-39
- •7 ppmv NOx emission limit, as in AQ-42
- •50 ppmv CO emission limit, as in AQ-43
- •5 ppmv NH3 emission limit, as in AQ-44

<u>Verification:</u> The project owner shall submit to the CPM emissions data demonstrating compliance with this condition as part of the Quarterly Operation Report (AQ-SC8). The project owner shall submit to the CPM all permit changes, whether initiated by the project owner or the District, pursuant to Condition AQ-SC7.

DISTRICT CONDITIONS - DETERMINATION OF COMPLIANCE

Facility Conditions

- AQ-1 Except for open abrasive blasting operations, the operator shall not discharge into the atmosphere from any single source of emissions whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour which is:
 - (a) As dark or darker in shade as that designated No.1 on the Ringelmann Chart, as published by the United States Bureau of Mines; or

(b) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subparagraph (a) of this condition. (SCAQMD F9-1)

<u>Verification:</u> The project owner shall document any known opacity violations in the Quarterly Operation Report (**AQ-SC8**). The project owner shall make the site available for inspection by representatives of the District, CARB, EPA and the Commission.

AQ-2 The operator shall not use diesel fuel containing sulfur compounds in excess of 0.05 percent (500 ppm) by weight. (SCAQMD F14-1)

<u>Verification:</u> The project owner shall make fuel purchase, MSDS or other fuel supplier records containing diesel fuel sulfur content available for inspection by representatives of the District, CARB and the Commission upon request.

AQ-3 The operator shall not purchase <u>fuel_diesel_oil</u> containing sulfur compounds in excess of 15 ppm by weight as supplied by the supplier.

This condition shall become effective on or after June 1, 2004. (SCAQMD F14-2)

<u>Verification:</u> The project owner shall make fuel oil purchase, MSDS or other fuel supplier records containing diesel fuel sulfur content available for inspection by representatives of the District, CARB and the Commission upon request.

- **AQ-4** Accidental release prevention requirements of Section 112(r)(7):
 - a). The operator shall comply with the accidental release prevention requirements pursuant to 40 CFR Part 68 and shall submit to the SCAQMD Executive Officer, as a part of an annual compliance certification, a statement that certifies compliance with all of the requirements of 40 CFR Part 68, including the registration and submission of a risk management plan (RMP).
 - b). The operator shall submit any additional relevant information requested by the Executive Officer or designated agency. (SCAQMD F24-1)

<u>Verification:</u> The project owner shall submit to the District and the CPM the documents listed above as part of an annual compliance certification.

Gas Turbines, Duct Burners, and SCR

Conditions of Certification AQ-5 through AQ-28 apply per turbine/HRSG unit unless otherwise identified.

AQ-5 The operator shall install and maintain a flow meter to accurately indicate the flow rate of the total hourly throughput of injected ammonia (NH₃).

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every twelve months. (SCAQMD 12-1)

<u>Verification:</u> The project owner shall make the site available for inspection of the ammonia flow meter and ammonia flow records by representatives of the District, CARB and the Commission.

AQ-6 The operator shall install and maintain a temperature gauge to accurately indicate the temperature in the exhaust at the inlet to the SCR reactor.

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every twelve months. (SCAQMD 12-2)

<u>Verification:</u> The project owner shall make the site available for inspection of the temperature gauge on the inlet to the SCR and the continuous temperature records by representatives of the District, CARB and the Commission.

AQ-7 The operator shall install and maintain a pressure gauge to accurately indicate the differential pressure across the SCR catalyst bed in inches water column.

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every twelve months. (SCAQMD 12-3)

<u>Verification:</u> The project owner shall make the site available for inspection of the SCR catalyst bed differential pressure gauge and the differential pressure records by representatives of the District, CARB and the Commission.

AQ-8 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
NO _x emissions	District Method 100.1	1 hour	Outlet of the SCR
CO emissions	District Method 100.1	1 hour	Outlet of the SCR
SO _x emissions	Approved District Method	District Approved Averaging Time	Fuel Sample
ROG emissions	Approved District Method	1 hour	Outlet of the SCR
PM emissions	Approved District Method	District Approved Averaging Time	Outlet of the SCR
NH ₃ emissions	District Method 207.1 and 5.3 or EPA Method 17	1 hour	Outlet of the SCR

The test shall be conducted after District approval of the source test protocol, but no later than 180 days after initial start-up. The District shall be notified of the date and time of the test at least 10 days prior to the test.

The test shall be conducted to determine the oxygen levels in the exhaust. In addition, the tests shall measure the fuel flow rate (CFH), the flue gas flow rate, and the turbine and steam turbine generating output in MW.

The test shall be conducted in accordance with a District approved source test protocol. The protocol shall be submitted to the AQMD engineer no later than 45 days before the proposed test date and shall be approved by the District before the test commences. The test protocol shall include the proposed operating conditions of the turbine during the tests, the identity of the testing lab, a statement from the testing lab certifying that it meets the criteria of Rule 304, and a description of all sampling and analytical procedures.

The test shall be conducted for compliance verification of the BACT VOC 2.0 ppmv limit. For natural gas fired turbines only, this shall be demonstrated by the following test method: a) Stack gas samples are extracted into Summa canisters, maintaining a final canister pressure between 400 - 500 mm Hg absolute, b) Pressurization of Summa canisters is done with zero gas analyzed/certified to containing less than 0.05 ppmv total hydrocarbons as carbon, and c) Analysis of Summa canisters is per EPA Method TO-12 (with pre-concentration) and the temperature of the Summa canisters when extracting samples for analysis is not to be below 70 degrees F. The use of this alternative method does not mean that it is more accurate than AQMD Method 25.3, nor does it mean that it may be used in lieu of AQMD method 25.3 without prior approval, except for the determination of compliance with the VOC BACT level of 2.0 ppmv calculated as carbon for natural gas fired turbines. Because the BACT level was set using data derived from various source test methods, this alternate method provides a fair comparison and represents the best sampling and analysis technique for this purpose at this time. The test results must be reported with two significant digits.

The test shall be conducted with and without duct firing when this equipment is operating at loads of 100, 75, and 50 percent of maximum load for the NO_x , CO, ROG and ammonia tests. For all other pollutants, the test shall be conducted with and without duct firing at 100% load only. (SCAQMD 29-1)

<u>Verification:</u> The project owner shall submit the proposed protocol for the initial source tests 45 days prior to the proposed source test date to <u>both</u>-the District <u>for approval</u> and <u>to the CPM</u> for <u>approvalreview</u>. The project owner shall notify the District and CPM no later than 10 days prior to the proposed initial source test date and time. The project owner shall submit source test results no later than 60 days following the initial source test date to both the District and CPM.

AQ-9 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
SO _x emissions	Approved District Method	District Approved Averaging Time	Fuel Sample
ROG emissions	Approved District Method	1 hour	Outlet of the SCR
PM emissions	Approved District Method	District Approved Averaging Time	Outlet of the SCR

The test(s) shall be conducted at least once every three years.

The test shall be conducted and the results submitted to the District within 60 days after the test date. The AQMD shall be notified of the date and time of the test at least 10 days prior to the test.

The test shall be conducted 1) when the gas turbine and the duct burners are operating simultaneously at 100 percent of maximum heat input and 2) when the gas turbine is operating alone at 100 percent of maximum heat input.

The test shall be conducted for compliance verification of the BACT VOC 2.0 ppmv limit. For natural gas fired turbines only, this shall be demonstrated by the following test method: a) Stack gas samples are extracted into Summa canisters, maintaining a final canister pressure between 400 - 500 mm Hg absolute, b) Pressurization of Summa canisters is done with zero gas analyzed/certified to containing less than 0.05 ppmv total hydrocarbons as carbon, and c) Analysis of Summa canisters is per EPA Method TO-12 (with pre-concentration) and the temperature of the Summa canisters when extracting samples for analysis is not to be below 70 degrees F. The use of this alternative method does not mean that it is more accurate than AQMD Method 25.3, nor does it mean that it may be used in lieu of AQMD method 25.3 without prior approval, except for the determination of compliance with the VOC BACT level of 2.0 ppmv calculated as carbon for natural gas fired turbines. Because the BACT level was set using data derived from various source test methods, this alternate method provides a fair comparison and represents the best sampling and analysis technique for this purpose at this time. The test results must be reported with two significant digits.

The test shall be conducted to demonstrate compliance with the Rule 1303 concentration and/or monthly emissions limit. (SCAQMD 29-2)

<u>Verification:</u> The project owner shall submit the proposed protocol for the triennial source tests 60 45 days prior to the proposed source test date to both the District for approval and to the CPM for approvalreview. The project owner shall notify the District and CPM no later than 10 days prior to the proposed source test date and time. The project owner shall submit source test results no later than 60 days following the source test date to both the District and CPM.

AQ-10 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
NH ₃ emissions	District Method 207.1 and 5.3 or EPA Method 17	1 hour	Outlet of the SCR

The test shall be conducted and the results submitted to the District within 60 days after the test date. The AQMD shall be notified of the date and time of the test at least 10 days prior to the test.

The test shall be conducted at least quarterly during the first twelve months of operation and at least annually thereafter. The NOx concentration, as determined by the certified CEMS, shall be simultaneously recorded during the ammonia slip test. If the CEMS is inoperable or not yet certified, a test shall be conducted to determine the NOx emissions using District Method 100.1 measured over a 60 minute averaging time period.

The test shall be conducted to demonstrate compliance with the Rule 1303 concentration limit. (SCAQMD 29-3)

<u>Verification:</u> The project owner shall submit the proposed protocol for the ammonia slip source tests 60-30 days prior to the proposed source test date to both the District for approval and to the CPM for approvalreview. The project owner shall notify the District and CPM no later than ten days prior to the proposed source test date and time. The project owner shall submit source test results no later than 60 days following the source test date to both the District and CPM.

AQ-11 The operator shall provide to the District a source test report (see AQ-8, AQ-9, and AQ-10)in accordance with the following specifications:

Source test results shall be submitted to the District no later than 60 days after the source test was conducted.

Emission data shall be expressed in terms of concentration (ppmv), corrected to 15 percent oxygen (dry basis), mass rate (lbs/hr), and lbs/MM cubic feet. In addition, solid PM emissions, if required to be tested, shall also be reported in terms of grains per DSCF.

All exhaust flow rates shall be expressed in terms of dry standard cubic feet per minute (DSCFM) and dry actual cubic feet per minute (DACFM).

All moisture concentration shall be expressed in terms of percent corrected to 15 percent oxygen.

Source test results shall also include the oxygen levels in the exhaust, the fuel flow rate (CFH), the flue gas temperature, and the generator power output (MW) under which the test was conducted. (SCAQMD 40-1)

<u>Verification:</u> See verifications for Conditions **AQ-8**, **AQ-9**, and **AQ-10**.

AQ-12 The operator shall not use natural gas containing the following specified compounds:

Compound	Grains per 100 scf
H2S	Greater than 0.25

This concentration limit is an annual average based on monthly sample of natural gas composition. (SCAQMD 61-1)

<u>Verification:</u> The project owner shall submit to the CPM and APCO turbine <u>emissions-fuel</u> data demonstrating compliance with this condition as part of the Quarterly Operation Report (**AQ-SC8**).

AQ-13 The operator shall limit emissions from this equipment as follows:

Contaminant Emissions Limit	
CO	9,960 LBS IN ANY 1 MONTH
PM ₁₀	7,440 LBS IN ANY 1 MONTH
ROG	4,188 LBS IN ANY 1 MONTH
SO _x	1,197 LBS IN ANY 1 MONTH

For the purpose of this condition, the limits shall be based on the <u>combined</u> emissions from each gas turbine <u>with and</u> its associated duct burner<u>s</u>.

The operator shall calculate the emissions by using monthly fuel use data and the following emission factors: PM_{10} with duct burners firing 4.23 lbs/mmscf, PM_{10} without duct burners firing 5.01 lbs/mmscf, ROG with duct burners firing 2.55 lbs/mmscf, ROG without duct burners firing 1.41 lbs/mmscf, SO_x 0.71 lbs/mmscf with and without duct burner firing.

The operator shall calculate the emissions for CO, during the commissioning period, using fuel consumption data and the following emission factor: 127.87 lb/mmscf.

The operator shall calculate the emissions for CO, after the commissioning period and prior to the CO CEMS certification, using fuel consumption data and the following emission factor: 19.76 lbs/mmscf.

The operator shall calculate the emissions for CO, after the CO CEMS certification, based on readings from the certified CEMS. In the event the CO CEMS is not operating or the emissions exceed the valid upper range of the analyzer, the emissions shall be calculated in accordance with the approved CEMS plan. (SCAQMD 63-1)

<u>Verification:</u> The project owner shall submit to the CPM and APCO turbine emissions data demonstrating compliance with this condition as part of the Quarterly Operation Report (**AQ-SC8**).

AQ-14 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

Natural gas fuel use during the commissioning period. (SCAQMD 67-1)

<u>Verification:</u> The project owner shall make the site available for inspection of the commissioning period natural gas usage data by representatives of the District, CARB and the Commission

AQ-15 The operator shall install and maintain a CEMS to measure the following parameters:

CO concentration in ppmv.

Concentrations shall be corrected to 15 percent oxygen on a dry basis.

The CEMS will convert the actual CO concentrations to mass emission rates (lbs/hr) and record the hourly emission rates on a continuous basis.

The CEMS shall be installed and operated, in accordance with an approved AQMD Rule 218 CEMS plan application. The operator shall not install the CEMS prior to receiving initial approval from AQMD.

The CEMS shall be installed and operated to measure CO concentration over a 15 minute averaging time period.

The CEMS shall be installed and operating no later than 90 days after initial startup of the turbine. (SCAQMD 82-1)

<u>Verification:</u> The project owner shall provide the CPM documentation of the Districts approval of the CEMS, within 15 days of its receipt. The project owner shall make the site available for inspection of the CEMS by representatives of the District, CARB and the Commission.

AQ-16 The operator shall install and maintain a CEMS to measure the following parameters:

NO_x concentration is expressed in ppmv.

Concentrations shall be corrected to 15 percent oxygen on a dry basis.

The CEMS shall be installed and operating no later than 12 months after initial start-up of the turbine and shall comply with the requirements of Rule 2012. During the interim period between the initial start-up and the provisional certification date of the CEMS, the operator shall comply with the monitoring requirements of Rule 2012(h)(2) and 2012(h)(3). Within two weeks of the turbine startup date, the operator shall provide written notification to the District of the exact date of start-up. (SCAQMD 82-2)

<u>Verification:</u> The project owner shall provide the CPM documentation of the Districts approval of the CEMS, within 15 days of its receipt. The project owner shall make the site available for inspection of the CEMS by representatives of the District, CARB and the Commission.

AQ-17 The 2.0 ppm NO_x emission limit(s) shall not apply during turbine commissioning, startup, and shutdown periods. Startup/shutdown time shall not exceed four hours per day per gas turbine. The commissioning period per gas turbine shall not exceed 636 operating hours from the date of initial startup. The operator shall provide the AQMD with written notification of the start-

up date. Written records of commissioning, startups, and shutdowns shall be maintained and made available upon request from AQMD. (SCAQMD 99-1)

<u>Verification:</u> The project owner shall submit, commencing one month from the time of gas turbine first fire, a monthly commissioning status report throughout the duration of the commissioning phase that demonstrates compliance with this condition and the emission limits of Condition AQ-13. The monthly commissioning status report shall include criteria pollutant emission estimates for each commissioning activity and total commissioning emission estimates. The monthly commissioning status report shall be submitted to the CPM until the report includes the completion of the initial commissioning activities. The project owner shall provide start-up and shutdown occurrence and duration data as part as part of the Quarterly Operation Report (AQ-SC8). The project owner shall make the site available for inspection of the commissioning and start-up/shutdown records by representatives of the District, CARB and the Commission.

AQ-18 The 3.0 ppm CO emission limit(s) shall not apply during turbine commissioning, startup, and shutdown periods. Startup/shutdown time shall not exceed four hours per day per gas turbine. The commissioning period per gas turbine shall not exceed 636 operating hours from the date of initial startup. The operator shall provide the AQMD with written notification of the initial start-up date. Written records of commissioning, startups, and shutdowns shall be maintained and made available upon request from AQMD. (SCAQMD 99-2)

<u>Verification:</u> See verification of Condition **AQ-17**.

AQ-19 The 14.03 lbs/mmscf NO_x emission limit(s) shall only apply during the interim period to report RECLAIM emissions. The interim period shall not exceed 12 months from the initial startup date. (SCAQMD 99-3)

<u>Verification:</u> The project owner shall submit to the CPM and APCO turbine emissions data demonstrating compliance with this condition <u>through the use of the required RECLAIM emission factor, as appropriate,</u> as part of the Quarterly Operation Report (AQ-SC8).

AQ-20 For the purpose of the following conditions continuously record shall be defined as recording at least once every hour and shall be calculated based upon the average of the continuous monitoring for that hour.

Condition AQ-5

Condition AQ-6 (SCAQMD 179-1)

Verification: See verifications for Conditions **AQ-5** and **AQ-6**.

AQ-21 For the purpose of the following condition continuously record shall be defined as recording at least once every hour and shall be calculated based upon the average of the continuous monitoring for that month.

Condition AQ-7 (SCAQMD 179-2)

Verification: See verification for Condition AQ-7.

- AQ-22 The 2.0 ppmv NO_x emission limit is averaged over 1 hour at 15 percent oxygen, dry basis. The limit shall not apply to the first fifteen 1-hour average NOx emissions above 2.0 ppmv, dry basis at 15% O2, in any rolling 12-month period for each combustion gas turbine provided that it meets all of the following requirements:
 - A. This equipment operates under any one of the qualified conditions described below:
 - Rapid combustion turbine load changes due to the following conditions:
 - Load changes initiated by the California ISO or a successor entity when the plant is operating under Automatic Generation Control; or
 - Activation of a plant automatic safety or equipment protection system which rapidly decreases turbine load
 - b) The first two 1-hour reporting periods following the initiation/shutdown of a fogging system injection pump
 - c) The first two 1-hour reporting periods following the initiation/shutdown of combustion turbine steam injection
 - d) The first two 1-hour reporting periods following the initiation of HRSG duct burners
 - e) Events as the result of technological limitation identified by the operator and approved in writing by the AQMD Executive Officer or his designees
 - B. The 1-hour average NOx emissions above 2.0 ppmv, dry basis at 15% O2, did not occur as a result of operator neglect, improper operation or maintenance, or qualified breakdown under Rule 2004(i).
 - C. The qualified operating conditions described in (A) above are recorded in the plant's operating log within 24 hours of the event, and in the CEMS by 5 p.m. the next business day following the qualified operating condition. The notations in the log and CEMS must describe the date and time of entry into the log/CEMS and the plant operating conditions responsible for NOx emissions exceeding the 2.0 ppmv 1-hour average limit.
 - D. The 1-hour average NOx concentration for periods that result from a qualified operating condition does not exceed 25 ppmv, dry basis at 15 percent O2.

All NOx emissions during these events shall be included in all calculations of hourly, daily, and annual mass emission rates as required by this permit. (SCAQMD 195-1)

<u>Verification:</u> The project owner shall submit to the CPM and APCO turbine CEMS emissions data demonstrating compliance with this condition as part of the Quarterly Operation Report (**AQ-SC8**).

AQ-23 The 3.0 ppmv CO emission limit is averaged over 1 hour at 15 percent oxygen, dry basis when the HRSG duct burners are not operating. The 4.0 ppmv CO emission limit is averaged over 1 hour at 15 percent oxygen, dry basis when the HRSG duct burners are operating. (SCAQMD 195-2)

<u>Verification:</u> The project owner shall submit to the CPM and APCO turbine CEMS emissions data demonstrating compliance with this condition as part of the Quarterly Operation Report (**AQ-SC8**).

AQ-24 The 2.0 ppmv ROG emission limit is averaged over 1 hour at 15 percent oxygen, dry basis. (SCAQMD 195-3)

<u>Verification:</u> See verifications for Conditions AQ-8 and AQ-9. The project owner shall submit to the CPM and APCO turbine emissions data demonstrating compliance with this condition as part of the Quarterly Operation Report (AQ-SC8).

AQ-25 The 5 ppmv NH₃ emissions limit is averaged over 1 hour at 15 percent oxygen, dry basis. (SCAQMD 195-6)

<u>Verification:</u>
See verification for Conditions AQ-8, AQ-10, and AQ-26. The project owner shall submit to the CPM and APCO turbine CEMS emissions data demonstrating compliance with this condition as part of the

AQ-26 The operator shall install, operate, and maintain an approved Continuous Emission Monitoring Device, approved by the Executive Officer, to monitor and record ammonia concentrations, and alert the operator (via audible or visible alarm) whenever ammonia concentrations are near, at, or in excess of the permitted ammonia limit of 5 ppmv, corrected to 15% oxygen. It shall continuously monitor or calculate, and record the following parameters:

Ammonia concentration, uncorrected in ppmv

Oxygen concentration in percent

Ammonia concentration in ppmv, corrected to 15% oxygen

Date, time, extent (in time) of all excursions above 5 ppmv, corrected to 15% oxygen

The Continuous Emission Monitoring Device described above shall be operated and maintained according to a Quality Assurance Plan (QAP) approved by the Executive Officer. The QAP must address contingencies for monitored ammonia concentrations near, at, or above the permitted compliance limit, and remedial actions to reduce ammonia levels once an exceedance has occurred.

The Continuous Emission Monitoring Device may not be used for compliance determination or emission information determination without corroborative data using an approved reference method for the determination of ammonia.

The Continuous Emission Monitoring Device shall be installed and operating no later than 90 days after initial startup of the turbine. (SCAQMD 232-1)

<u>Verification:</u> The project owner shall provide the CPM documentation of the District's approval of the <u>CEMS</u>continuous emission monitoring device, within 15 days of its receipt. The project owner shall make the site available for inspection of the <u>CEMS</u> monitoring device and <u>CEMS</u>-monitoring device records by representatives of the District, CARB and the Commission. The project owner shall submit to the <u>CPM</u> emissions data generated by the continuous emission monitoring device as part of the <u>Quarterly Operation Report</u> (<u>AQ-SC8</u>).

AQ-27 This equipment shall not be operated unless the operator demonstrates to the Executive Officer that the facility holds sufficient RTCs to offset the prorated annual emissions increase for the first compliance year of operation. In addition, this equipment shall not be operated unless the operator demonstrates to the Executive Officer that, at the commencement of each compliance year after the first compliance year of operation, the facility holds sufficient RTCs in an amount equal to the annual emissions increase. (SCAQMD 296-1)

<u>Verification:</u> The project owner shall submit to the CPM copies of all RECLAIM reports filed with the District demonstrating compliance with this condition as part of the Quarterly Operation Report (**AQ-SC8**).

AQ-28 For the purpose of determining compliance with District Rule 475, combustion contaminant emissions may exceed the concentration limit or the mass emission limit listed, but not both limits at the same time. (SCAQMD 327-1)

<u>Verification:</u> See verifications for Conditions AQ-8 and AQ-9. The project owner shall submit to the CPM and APCO turbine CEMS emissions data demonstrating compliance with this condition as part of the Quarterly Operation Report (AQ-SC8).

Auxiliary Boiler and SCR

AQ-29 The operator shall install and maintain a flow meter to accurately indicate the flow rate of the total hourly throughput of injected ammonia (NH₃).

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every twelve months. (SCAQMD 12-1)

<u>Verification:</u> The project owner shall make the site available for inspection of the ammonia flow meter and ammonia flow records by representatives of the District, CARB and the Commission.

AQ-30 The operator shall install and maintain a temperature gauge to accurately indicate the temperature in the exhaust at the inlet to the SCR reactor.

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every twelve months. (SCAQMD 12-2)

<u>Verification:</u> The project owner shall make the site available for inspection of the temperature gauge on the inlet to the SCR and the continuous temperature records by representatives of the District, CARB and the Commission.

AQ-31 The operator shall install and maintain a pressure gauge to accurately indicate the differential pressure across the SCR catalyst bed in inches water column.

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every twelve months. (SCAQMD 12-3)

<u>Verification:</u> The project owner shall make the site available for inspection of the SCR catalyst bed differential pressure gauge and the differential pressure records by representatives of the District, CARB and the Commission.

AQ-32 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
NO _x emissions	District Method 100.1	1 hour	Outlet of the SCR
CO emissions	District Method 100.1	1 hour	Outlet of the SCR
SO _x emissions	Approved District Method	District Approved Averaging Time	Fuel Sample
ROG emissions	Approved District Method	1 hour	Outlet of the SCR
PM emissions	Approved District Method	District Approved Averaging Time	Outlet of the SCR
NH ₃ emissions	District Method 207.1 and 5.3 or EPA Method 17	1 hour	Outlet of the SCR

The test shall be conducted after District approval of the source test protocol, but no later than 180 days after initial start-up. The District shall be notified of the date and time of the test at least 10 days prior to the test.

The test shall be conducted to determine the oxygen levels in the exhaust. In addition, the tests shall measure the fuel flow rate (CFH), the flue gas flow rate.

The test shall be conducted in accordance with a District approved source test protocol. The protocol shall be submitted to the AQMD engineer no later than 45 days before the proposed test date and shall be approved by the District before the test commences. The test protocol shall include the proposed operating conditions of the auxiliary boiler during the tests, the identity of the testing lab, a statement from the testing lab certifying that it

meets the criteria of Rule 304, and a description of all sampling and analytical procedures.

The test shall be conducted when this equipment is operating at loads of 100, 75, and 50 percent of maximum load for the NOx, CO, ROG and ammonia tests. For all other pollutants, the test shall be conducted at 100% load only. (SCAQMD 29-1)all pollutants.

<u>Verification:</u> The project owner shall submit the proposed protocol for the initial source tests 45 days prior to the proposed source test date to both the District <u>for approval and to the CPM for review. The project owner shall submit source test results no later than <u>and 60</u> days following the source test date to both the District and CPM. The project owner shall notify the District and CPM no later than 10 days prior to the proposed initial source test date and time.</u>

AQ-33 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
NH ₃ emissions	District Method 207.1 and 5.3 or EPA Method 17	1 hour	Outlet of the SCR

The test shall be conducted and the results submitted to the District within 60 days after the test date. The AQMD shall be notified of the date and time of the test at least 10 days prior to the test.

The test shall be conducted at least quarterly during the first twelve months of operation and at least annually thereafter. The NO_x concentration, as determined by the certified CEMS, shall be simultaneously recorded during the ammonia slip test. If the CEMS is inoperable or not yet certified, a test shall be conducted to determine the NO_x emissions using District Method 100.1 measured over a 60 minute averaging time period.

The test shall be conducted to demonstrate compliance with the Rule 1303 concentration limit. (SCAQMD 29-3)

<u>Verification:</u> The project owner shall submit the proposed protocol for the source tests 60-30 days prior to the proposed source test date to both the District for approval and to the CPM for approval review. The project owner shall notify the District and CPM no later than ten days prior to the proposed source test date and time. The project owner shall submit source test results no later than 45 days following the source test date to both the District and CPM.

AQ-34 The operator shall provide to the District a source test report (see AQ-32 and AQ-33) in accordance with the following specifications:

Source test results shall be submitted to the District no later than 60 days after the source test was conducted.

Emission data shall be expressed in terms of concentration (ppmv), corrected to 3 percent oxygen (dry basis), mass rate (lbs/hr), and lbs/MM cubic feet. In addition, solid PM emissions, if required to be tested, shall also be reported in terms of grains per DSCF.

All exhaust flow rates shall be expressed in terms of dry standard cubic feet per minute (DSCFM) and dry actual cubic feet per minute (DACFM).

All moisture concentration shall be expressed in terms of percent corrected to 3 percent oxygen.

Source test results shall also include the oxygen levels in the exhaust, the fuel flow rate (CFH), the flue gas temperature, and the generator power output (MW) under which the test was conducted. (SCAQMD 40-2)

Verification: See verifications for Conditions **AQ-32** and **AQ-33**.

AQ-35 The operator shall not use natural gas containing the following specified compounds: Reserved.

Compound	Grains per 100 scf
H2S	Greater than 0.25

This concentration limit is an annual average based on monthly sample of natural gas composition.

<u>Verification:</u> Reserved. The project owner shall submit to the CPM and APCO boiler emissions data demonstrating compliance with this condition as part of the Quarterly Operation Report (AQ-SC8).

AQ-36 The operator shall limit emissions from this equipment as follows:

Contaminant	Emissions Limit
CO	667 LBS IN ANY 1 MONTH
PM ₁₀	233 LBS IN ANY 1 MONTH
ROG	127 LBS IN ANY 1 MONTH
SO _x	19 LBS IN ANY 1 MONTH

The operator shall calculate the emissions by using monthly fuel use data and the following emission factors: CO 21.72 lb/mmscf, PM_{10} 7.58 lbs/mmscf, PM_{10} 7.58 lbs/mmscf.

The operator shall calculate the emissions for CO, after the CO CEMS certification, based on readings from the certified CEMS. In the event the CO CEMS is not operating or the emissions exceed the valid upper range of the analyzer, the emissions shall be calculated in accordance with the approved CEMS plan. (SCAQMD 63-2)

<u>Verification:</u> The project owner shall submit to the CPM and APCO <u>turbine_boiler</u> emissions data demonstrating compliance with this condition as part of the Quarterly Operation Report (**AQ-SC8**).

AQ-37 The operator shall install and maintain a CEMS to measure the following parameters:

CO concentration in ppmv.

Concentrations shall be corrected to 3 percent oxygen on a dry basis.

The CEMS will convert the actual CO concentrations to mass emission rates (lbs/hr) and record the hourly emission rates on a continuous basis.

The CEMS shall be installed and operated, in accordance with an approved AQMD Rule 218 CEMS plan application. The operator shall not install the CEMS prior to receiving initial approval from AQMD.

The CEMS shall be installed and operated to measure CO concentration over a 15 minute averaging time period.

The CEMS shall be installed and operating no later than 90 days after initial startup of the boiler. (SCAQMD 82-3)

<u>Verification:</u> The project owner shall provide the CPM documentation of the Districts approval of the CEMS, within 15 days of its receipt. The project owner shall make the site available for inspection of the CEMS by representatives of the District, CARB and the Commission.

AQ-38 The operator shall install and maintain a CEMS to measure the following parameters:

NO_x concentration is expressed in ppmv.

Concentrations shall be corrected to 3 percent oxygen on a dry basis.

The CEMS shall be installed and operating no later than 12 months after initial start-up of the boiler and shall comply with the requirements of Rule 2012. During the interim period between the initial start-up and the provisional certification date of the CEMS, the operator shall comply with the monitoring requirements of Rule 2012(h)(2) and 2012(h)(3). Within two weeks of the boiler startup date, the operator shall provide written notification to the District of the exact date of start-up. (SCAQMD 82-4)

<u>Verification:</u> The project owner shall provide the CPM documentation of the Districts approval of the CEMS, within 15 days of its receipt. The project owner shall make the site available for inspection of the CEMS by representatives of the District, CARB and the Commission.

AQ-39 The 8.36 lbs/mmscf NO_x emission limit(s) shall only apply during the interim reporting period to report RECLAIM emissions. The interim reporting period is defined as before the CEMS is certified, and it shall not exceed 12 months from the initial startup date. (SCAQMD 99-4)

<u>Verification:</u> The project owner shall submit to the CPM and APCO auxiliary boiler emissions data demonstrating compliance with this condition <u>through the use of the required RECLAIM emission factor</u>, as appropriate, as part of the Quarterly Operation Report (**AQ-SC8**).

AQ-40 For the purpose of the following conditions continuously record shall be defined as recording at least once every hour and shall be calculated based upon the average of the continuous monitoring for that hour.

Condition AQ-29
Condition AQ-30 (SCAQMD 179-1)

Verification: See verifications for Conditions **AQ-29** and **AQ-30**.

AQ-41 For the purpose of the following condition continuously record shall be defined as recording at least once every hour and shall be calculated based upon the average of the continuous monitoring for that month.

Condition AQ-31 (SCAQMD 179-2)

Verification: See verification for Condition **AQ-31**.

AQ-42 The 7 ppmv NO_x emission limit(s) are averaged over one hour at 3 percent oxygen, dry basis. (SCAQMD 195-4)

<u>Verification:</u> The project owner shall submit to the CPM and APCO auxiliary boiler CEMS emissions data demonstrating compliance with this condition as part of the Quarterly Operation Report (**AQ-SC8**).

AQ-43 The 50 ppmv CO emission limit(s) are averaged over 1 hour at 3 percent oxygen, dry basis. (SCAQMD 195-5)

<u>Verification:</u> The project owner shall submit to the CPM and APCO auxiliary boiler CEMS emissions data demonstrating compliance with this condition as part of the Quarterly Operation Report (**AQ-SC8**).

AQ-44 The 5 ppmv NH3 emission limit(s) are averaged over 1 hour at 3 percent oxygen, dry basis. (SCAQMD 195-7)

<u>Verification:</u> <u>See verification for Conditions AQ-32, AQ-33, and AQ-45. The project owner shall submit to the CPM and APCO auxiliary boiler CEMS emissions data demonstrating compliance with this condition as part of the Quarterly Operation Report (AQ-SC8).</u>

AQ-45 The operator shall install, operate, and maintain an approved Continuous Emission Monitoring Device, approved by the Executive Officer, to monitor and record ammonia concentrations, and alert the operator (via audible or visible alarm) whenever ammonia concentrations are near, at, or in excess of the permitted ammonia limit of 5 ppmv, corrected to 3% oxygen. It shall continuously monitor or calculate, and record the following parameters:

Ammonia concentration, uncorrected in ppmv

Oxygen concentration in percent

Ammonia concentration in ppmv, corrected to 3 percent oxygen

Date, time, extent (in time) of all excursions above 5 ppmv, corrected to 3 percent oxygen

The Continuous Emission Monitoring Device described above shall be operated and maintained according to a Quality Assurance Plan (QAP) approved by the Executive Officer. The QAP must address contingencies for monitored ammonia concentrations near, at, or above the permitted compliance limit, and remedial actions to reduce ammonia levels once an exceedance has occurred.

The Continuous Emission Monitoring Device may not be used for compliance determination or emission information determination without corroborative data using an approved reference method for the determination of ammonia.

The Continuous Emission Monitoring Device shall be installed and operating no later than 90 days after initial startup of the boiler. (SCAQMD 232-2)

<u>Verification:</u> The project owner shall provide the CPM documentation of the District's approval of the <u>CEMS</u>continuous emission monitoring device, within 15 days of its receipt. The project owner shall make the site available for inspection of the <u>CEMS</u> monitoring device and <u>CEMS</u>-monitoring device records by representatives of the District, CARB and the Commission. <u>The project owner shall submit to the CPM</u> emissions data generated by the continuous emission monitoring device as part of the Quarterly Operation Report (**AQ-SC8**).

AQ-46 This equipment shall not be operated unless the operator demonstrates to the Executive Officer that the facility holds sufficient RTCs to offset the prorated annual emissions increase for the first compliance year of operation. In addition, this equipment shall not be operated unless the operator demonstrates to the Executive Officer that, at the commencement of each compliance year after the first compliance year of operation, the facility holds sufficient RTCs in an amount equal to the annual emissions increase. (SCAQMD 296-1)

<u>Verification:</u> The project owner shall submit to the CPM copies of all RECLAIM reports filed with the District demonstrating compliance with this condition as part of the Quarterly Operation Report (**AQ-SC8**).

Emergency Generator and Fire Pump Engine

<u>Conditions of Certification AQ-47 through AQ-50 apply separately to the emergency generator and fire pump engine, unless otherwise specified.</u>

AQ-47 The operator shall limit the operating time of the engine to no more than 200 hours per year. (SCAQMD 1-1)

<u>Verification:</u> The project owner shall submit to the CPM and APCO the emergency generator and fire pump IC engines operations data demonstrating compliance with this condition as part of the Quarterly Operation Report (**AQ-SC8**).

AQ-48 The operator shall install and maintain a non-resetable elapsed time meter to accurately indicate the elapsed operating time of the engine. (SCAQMD 12-4)

<u>Verification:</u> The project owner shall make the emergency generator and fire pump engine available for inspection by representatives of the District, CARB and the Commission upon request.

AQ-49 The operator shall install and maintain a non-resetable elapsed fuel meter to accurately indicate the engine fuel consumption. (SCAQMD 12-5)

<u>Verification:</u> The project owner shall make the emergency generator and fire pump engine available for inspection by representatives of the District, CARB and the Commission upon request.

AQ-50 The operator shall keep records, in a manner approved by the District, for the following parameters or items.

Date of operation, the elapsed time, in hours, and the reason for operation.

Records shall be kept and maintained on file for a minimum of two years and made available to district personnel upon request. (SCAQMD 67-2)

<u>Verification:</u> The project owner shall make the emergency generator and fire pump engine records available for inspection by representatives of the District, CARB and the Commission upon request.

Ammonia Storage Tanks

AQ-51 The operator shall vent this equipment, during filling, only to the vessel from which it is being filled. (SCAQMD 144-1)

<u>Verification:</u> The project owner shall make the site available for inspection by representatives of the District, CARB and the Commission upon request.

AQ-52 The operator shall install and maintain a pressure relief valve set at 25 psig. (SCAQMD 157-1)

<u>Verification:</u> The project owner shall make the ammonia tank pressure relief valve and its specifications available for inspection by representatives of the District, CARB and the Commission upon request.

Organic Materials

AQ-53 The operator shall be subject to the applicable requirements of District Rule 1171 for VOC control from Solvent Cleaning Operations.

This requirement shall apply to Rule 219 Exempted Cleaning Equipment. (SCAQMD 23-1)

<u>Verification:</u> The project owner shall make the site available for inspection by representatives of the District, CARB and the Commission upon request.

AQ-54 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

For architectural applications where no thinners, reducers, or other VOC containing materials are added, maintain semi-annual records for all coating consisting of (a) coating type, (b) VOC content as supplied in grams per liter (g/l) of materials for low-solids coatings, (c) VOC content as supplied in g/l of coating, less water and exempt solvent, for other coatings.

For architectural applications where thinners, reducers, or other VOC containing materials are added, maintain daily records for each coating consisting of (a) coating type, (b) VOC content as applied in grams per liter (g/l) of materials used for low-solids coatings, (c) VOC content as applied in g/l of coating, less water and exempt solvent, for other coatings.

This requirement shall apply to Rule 219 Exempted Coating Equipment. (SCAQMD 67-3)

<u>Verification:</u> The project owner shall make the site available for inspection by representatives of the District, CARB and the Commission upon request.

ATTACHMENT AIR QUALITY 1 - AQ-SC16, EQUIPMENT DESCRIPTION

[Following is a copy of Equipment Description from Addendum to Final Determination of Compliance, filed by SCAQMD, dated April 25, 2003.]

EQUIPMENT DESCRIPTION

Section H of the facility permit: Permit to Construct and temporary Permit to Operate

PROCESS 1: COMBUSTION AN					
SYSTEM 1: GAS TURBINE COM	ABUST:	ION			
Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions and Requirements	Conditions
TURBINE, #1, NATURAL GAS, GENERAL ELECTRIC, MODEL 7251FB, COMBINED CYCLE, WITH DRY LOW NOX BURNERS, WITH STEAM INJECTION, 1,813 MMBtu/HR. WITH A/N 391432	D1	C17	NOx: MAJOR SOURCE	NOx: 2.0 PPMV (4) [RULE 2005 BACT]; NOx: 98.3 PPMV NATURAL GAS (8) [40CFR 60 SUBPART GG]; NOx (INTERIM): 14.03 LBS/MMSCF (1) [RULE 2012];	29-1, 29-2, 40-1, 61-1, 63-1, 67-1, 82-1, 82-2, 99-1, 99-2, 99-3, 193- 1, 195-1, 195-2, 195-
GENERATOR, 174 MW GENERATOR, #1, HEAT	B11 B13			CO: 3.0 PPMV (4) [RULE 1303 BACT]; CO: 4.0 PPMV [RULE 1303 BACT]; CO: 2,000 PPMV (5) [RULE 407];	3, 296-1, 327-1
RECOVERY STEAM GENERATOR (HRSG)				ROG : 2.0 PPMV (4) [RULE 1303-BACT];	
STEAM TURBINE GENERATOR, 322 MW COMMON WITH HRSG #2	B15			PM: 0.1 GR/SCF (5) [RULE 409]; PM: 11 LBS/HR (5) [RULE 475]; PM: 0.01 GR/SCF (5A) [RULE 475];	
				SOx: 150 PPMV (8) [40CFR 60 SUBPART GG]; SO2: (9) [40CFR 72 – ACID RAIN]; H2S LEVEL IN NATURAL GAS LESS THAN 0.25 GRAIN PER 100 SCF [RULE 1303-OFFSET]	
PROCESS 1: COMBUSTION AN	D POW	ER GENER	ATION		
SYSTEM 1: GAS TURBINE COM					1
Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions and Requirements	Conditions
BURNER, DUCT, NATURAL GAS, 697 MMBtu/HR, LOCATED IN THE HRSG OF TURBINE #1	D14	C17	NOx: MAJOR SOURCE	NOx: 2.0 PPMV (4) [RULE 2005 BACT]; NOx: 0.2 LB/MMBtu NATURAL GAS (8) [40CFR 60 SUBPART DA]; NOx(INTERIM): 14.03	29-1, 29-2, 40-1, <u>61-1</u> , 63-1, 67-1, 82-1, 82-2, 99-1, 99-2,

CO: 4.0 PPMV (4) [RULI 1303 BACT]; CO: 2.000 PPMV (5) [RULE 407]; ROG: 2.0 PPMV (4) [RULI 1303-BACT]; PM: 0.1 GR/SCF (5) [RUL 409]; PM: 11 LBS/HR (5) [RULE 475]; PM: 0.01 GR/SCF (5A) [RULE 475]; P	LE]; A]; ID
STACK, #1 SERVING TURBINE AND HRSG #1, 195' HEIGHT X 18'6" DIAMETER A/N: 391432	
PROCESS 1: COMBUSTION AND POWER GENERATION	
SYSTEM 1: GAS TURBINE COMBUSTION	
Equipment ID Connected No. To RECLAIM Source Type/Monitoring Unit Emissions and Requireme	ents Conditions
TURBINE, #2, NATURAL GAS, GENERAL ELECTRIC, MODEL 7251FB, COMBINED CYCLE, WITH DRY LOW NOX BURNERS, WITH STEAM INJECTION, 1,813 MMBtu/HR. D2 C18 NOx MAJOR 2005]; NOX 98.3 PPMV (8) [40CFR 60 SUBPART GO NOX(INTERIM): 14.03 LI MMSCF (1) [RULE 2012] CO: 3.0 PPMV (4) [RULE	8) 40-1, <u>61-1</u> , 63-1, 67-1, 8S/ 82-1, 82-2, 99-1, 99-2, 99-3, 193-
WITH A/N: 391424 GENERATOR, #2, SERVICE B12 B12 B1303 BACT]; CO: 4.0 PPM [RULE 1303 BACT]; CO: 2,000 PPMV (5) [RULE	MIV 105_2 105_

TUDDING #2 174 MW/				4071.	
TURBINE #2, 174 MW				407];	
GENERATOR, #2, HEAT RECOVERY STEAM	B22			ROG : 2.0 PPMV (4) [RULE 1303-BACT];	
GENERATOR (HRSG)				PM : 0.1 GR/SCF (5) [RULE 409]; PM: 11 LBS/HR (5)	
STEAM TURBINE	B15			[RULE 475]; PM: 0.01	
GENERATOR, 322 MW, COMMON WITH HRSG #1				GR/SCF (5A) [RULE 475];	
				SOx : 150 PPMV (8) [40CFR 60 SUBPART GG] SO2: (9)	
				[40CFR 72 – ACID RAIN]; H2S LEVEL IN NATURAL	
				GAS LESS THAN 0.25 GR	
				PER 100 SCF [RULE 1303- OFFSET]	
BURNER, DUCT, NATURAL	D21	C18	NOx:	NOx: 2.0 PPMV (4) [RULE	29-1, 29-2,
GAS, 697 MMBtu/HR, LOCATED IN THE HRSG OF TURBINE #2			MAJOR SOURCE	2005 BACT]; NOx: 0.2 LB/ MMBtu NATURAL GAS (8)	40-1, <u>61-1</u> , 63-1, 67-1,
A/N 391424				[40CFR 60 SUBPART DA]; NOx(INTERIM): 14.03 LBS/	82-1, 82-2, 99-1, 99-2,
111(3)1121				MMSCF (1) [RULE 2012];	99-3, 193- 1, 195-1,
				CO : 4.0 PPMV (4) [RULE	195-2, 195-
				1303 BACT]; CO: 2,000 PPMV (5) [RULE 407];	3, 296-1, 327-1
				ROG : 2.0 PPMV (4) [RULE 1303-BACT];	
				PM : 0.1 GR/SCF (5) [RULE	
				409]; PM: 11 LBS/HR (5)	
				[RULE 475]; PM: 0.01 GR/SCF (5A) [RULE 475];	
PROCESS 1: COMBUSTION AND SYSTEM 1: GAS TURBINE COM			ATION		
Equipment Equipment	ID	Connected	RECLAIM	Emissions and Requirements	Conditions
	No.	То	Source Type/ Monitoring		
			Unit		
				SOx: 0.2 LB/MMBtu (8)	
				[40CFR 60 SUBPART DA]; SO ₂ : (9) [40CFR 72 – ACID	
				RAIN]; H2S LEVEL IN	
				NATURAL GAS LESS THAN 0.25 GR PER 100	
				SCF [RULE 1303-OFFSET]	
CO OXIDATION CATALYST #2, SERVING TURBINE/HRSG #2	C18	D2, D21, C5			
A/N 391424					
SELECTIVE CATALYTIC	C5	C18		NH3: 5 PPMV (4) [RULE	12-1, 12-2,
REDUCTION, #2, SERVING		<u> </u>		1303-BACT]	12-3, 29-3,

TURBINE/HRSG #2, WITH					179-1, 179-
A/N:391425					2, 195-6, 232-1
WITH AMMONIA INJECTION, INJECTION GRID STACK, #2, SERVING TURBINE	B25 S26	C5			
AND HRSG #2, HEIGHT: 195'0", DIAMETER: 18'6"					
A/N: 391425					
PROCESS 1: COMBUSTION AND	D POW	ER GENER	ATION		
SYSTEM 2: AUXILIARY EQUIP	MENT				
BOILER, AUXILIARY, NATURAL GAS FIRED, 129 MMBtu/HR	D3	C27	NOx MAJOR SOURCE	NOx: 7.0 PPMV (4) [RULE 2005 BACT]; NOx: 8.36 LBS/ MMSCF (1) [RULE 2012];	29-4, 40-2, 61-1, 63-2, 82-3, 82-4, 99-4, 193-
A/N 391426 BURNER, NATURAL GAS, TBD				CO: 50 PPMV (4) [RULE 1303 BACT]; CO: 2,000 PPMV (5) [RULE 407];	1, 195-4, 195-5, 296- 1
				PM : 0.1 GR/SCF (5) [RULE 409];	
CO OXIDATION CATALYST #3, SERVING AUXILIARY BOILER,	C27	D3, C6			
A/N 391427					
PROCESS 1: COMBUSTION AND	D POW	ER GENER	ATION		
SYSTEM 2: AUXILIARY EQUIP	MENT				
Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions and Requirements	Conditions
SELECTIVE CATALYTIC REDUCTION, #3, SERVING AUXILIARY BOILER	C6	C27		NH3 : 5 PPMV (4) [RULE 1303-BACT]	12-1, 12-2, 12-3, 29-3, 179-1, 179- 2, 195-7,
WITH A/N:391427					232-2
WITH AMMONIA INJECTION, INJECTION GRID	B25				
EMERGENCY GENERATOR, NATURAL GAS, IC ENGINE, CATERPILLAR, MODEL G3516LE, 1467 HP	D9		NOx: PROCESS UNIT	NOx: 1.5 GM/BHP-HR (4) [RULE 2005]; NOx: 380 LB/MMSCF (1) [RULE 2012];	1-1, 12-4, 12-5, 67- 2,193-1, 296-1
A/N 391430				CO: 2.0 GM/BHP-HR (4) [RULE 1303]; ROG: 1.5 GM/BHP-HR (4) [RULE 1303];	
EMERGENCY FIRE PUMP, ENGINE, DIESEL,	D10		NOx: PROCESS	NOx: 5.89 GM/BHP-HR (4) [RULE 2005]; NOx: 240	1-1, 12- 4,12-5, 67-

CATERPILLAR, MODEL 3406B, 337 BHP A/N 391431 PROCESS 2: INORGANIC CHEM	AIC'AI	STORAGE	UNIT	LBS/1000 GAL (1) [RULE 2012]; CO: 3.55 GM/BHP-HR (4) [RULE 1303]; ROG: 1.0 GM/BHP-HR (4) [RULE 1303];	2,193-1, 296-1	
SYSTEM 1: AMMONIA STORAC						
STORAGE TANK, SERVING TURBINE #1, WITH A VAPOR RETURN LINE, 28% WT AQUEOUS AMMONIA SOLUTION, 16,000 GAL. A/N 391428	D7				144-1, 157- 1, 193-1	
STORAGE TANK, SERVING TURBINE #2, WITH A VAPOR RETURN LINE, 28% WT AQUEOUS AMMONIA SOLUTION, 16,000 GAL. A/N 391429	D8				144-1, 157- 1, 193-1	
PROCESS 3: RULE 219 EXEMPT EQUIPMENT SUBJECT TO SOURCE-SPECIFIC RULE						
Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions and Requirements	Conditions	
RULE 219 EXEMPT EQUIPMENT, COATING EQUIPMENT, ARCHITECTURE COATINGS	Е			ROG: (9) [RULE 1113, 5-4- 1999; RULE 1171, 6-13- 1997]	67-3	
RULE 219 EXEMPT CLEANING EQUIPMENT USING SOLVENTS	Е			ROG: (9) [RULE 1171, 6-13-1997]	23-1	

BIOLOGICAL RESOURCES

Staff offers the following corrections and updates to the Biological Resources Section of the FSA.

PAGE 5.2-3:

<u>Draft Western Riverside Multiple Sspecies Habitat Conservation Plan</u> (<u>Draft MSHCP</u>)

The draft Western Riverside MSHCP is an element of the Riverside County Integrated Project. The draft MSHCP is designed to conserve open space, nature preserves and wildlife areas for over 150 species in western Riverside County. The reserve planning area considers: (1) existing public and quasi-public lands totaling approximately 347,000 acres; (2) criteria areas totaling approximately 153,000 acres that are brought into the reserve area as important corridors and linkages for the reserve area. Criteria areas are identified by groups of block-shaped areas with common conservation goals. The draft MSHCP will enable Riverside County to efficiently plan for future land development, while protecting the natural environment. A public review draft of this document, including a draft implementing agreement, was released in November 2002 (Riverside County 2002a). The draft MSHCP was adopted by the Riverside County Board of Supervisors on June 17, 2003 and will be approved by the remaining participants within the next few months. The project site falls approximately within the center of the planning area covered by the draft MSHCP, but does not fall within any MSHCP "criteria areas", which are subject to specific permitting conditions. The plan however, does state that private development outside criteria areas, but within the plan area, is subject to draft MSHCP policies that apply outside the criteria areas (e.g., protection of riparian/riverine areas and vernal pools). These policies have been incorporated as part of the proposed project's conditions of certification.

PAGE 5.2-26:

Purchase of Emission Credits

Staff identified that power plant emissions, if unmitigated, would contribute to the degradation of air quality in the basin and possibly change the vegetation communities. The IEEC plant will implement BACT, which means that controls at the source will achieve the maximum reduction of nitrogen emissions technically feasible. In addition, emission reduction credits (ERCs) would be purchased through a market system at a ratio equal or greater than 1:1. (In the South Coast Air Quality Management District credits for NOx emissions are traded under the RECLAM program and called RECLAIM Trading Credits or RTCs.) The ratio is in part determined by whether the credits are purchased locally (smaller ratio) or regionally (higher ratio) (see the AIR QUALITY section of this FSA). Mechanisms are in place to encourage purchase of credits locally. Although this addresses only stationary sources the objective is to ensure that the IEEC should not significantly deteriorate air quality. Both BACT and RTCs would be used to mitigate NOx emissions for the IEEC plant.

PAGE 5.2-27:

There are several local ordinances that pertain to planting and landscaping, open space and Stephens' kangaroo rat habitat fees, light pollution, etc. that are noted in the LORS Section of this FSA and are addressed in Conditions of Certification BIO-5, BIO-11 and BIO-12. The applicant has undertaken informal conferences with the USFWS, as well as the CDFG and Riverside County to ensure compliance with the ESA for potential impacts to Stephens' kangaroo rat. The USFWS has provided comment on the Preliminary Staff Assessment (PSA), and completed informal Section 7 consultation with the USACE and EPA, and informal conferences with the applicant (USFWS 2002d and 2003). The USFWS has indicated that compliance with the regional incidental take permit (Stephens' kangaroo rat HCP) will be required to ensure ESA compliance for this species. This requirement will be incorporated into the applicant's BRMIMP pursuant to Condition of Certification BIO-5 to ensure that any related impacts are reduced to levels that are less than significant.

Condition of Certification BIO-9 ensures that the project will comply with the draft Western Riverside MSHCP policies applicable to private development that may impact sensitive habitat.

PAGE 5.2-27:

The applicant has submitted permit applications to ensure compliance of the IEEC project with Sections 401 and 404 of the CWA (FWEC 2002e, Data Response 165) and the CAA (see AIR QUALITY section in this FSA). The applicable conditions of these permits will be incorporated into the applicant's BRMIMP pursuant to Conditions of Certification BIO-7 and BIO-8. The USACE and EPA, which are the federal permitting agencies for this project, initiated informal consultation with the USFWS to ensure compliance with the ESA for potential impacts to Stephens' kangaroo rat and vernal pool fairy shrimp. Recommendations included in the USFWS response to informal Section 7 consultation with the USACE and EPA (USFWS 2003) and informal conferencing with the applicant (USFWS 2002d) will also be incorporated into the applicant's BRMIMP pursuant to Conditions of Certification BIO-5, BIO-9, BIO-10 and BIO-13 to ensure that any related impacts are reduced to levels that are less than significant. Condition of Certification **BIO-9** also addresses compliance with policy in the draft Western Riverside MSHCP applicable to vernal pool impacts. The recommendations from USFWS include avoidance measures to ensure that the federally threatened vernal pool fairy shrimp will not be adversely affected by the project (USFWS 2002d and 2003). The USFWS has provided concurrence to the USACE and EPA, that implementation of these measures will ensure compliance with the ESA (USFWS 2003).

CONDITIONS OF CERTIFICATION

Staff agrees to the following changes to the Conditions of Certification:

BIO-1 No changes were proposed by the applicant or by staff.

BIO-1 The project owner shall submit the resume, including contact information, of the proposed Designated Biologist to the CPM for approval prior to the start of any site or related facilities mobilization.

<u>Verification:</u> The project owner shall submit the specified information at least 60 days prior to the start of any site or related facilities mobilization. Site or related facilities mobilization shall not commence until an approved Designated Biologist is available to be on site.

The Designated Biologist must meet the following minimum qualifications:

- 1. Bachelor's Degree in biological sciences, zoology, botany, ecology, or a closely related field;
- Three years of experience in field biology or current certification of a nationally recognized biological society, such as The Ecological Society of America or The Wildlife Society; and
- 3. At least one year of field experience with biological resources found in or near the project area.

If a Designated Biologist needs to be replaced, the specified information of the proposed replacement must be submitted to the CPM at least ten working days prior to the termination or release of the preceding Designated Biologist. In an emergency, the project owner shall immediately notify the CPM to discuss the qualifications and approval of a short-term replacement while a permanent Designated Biologist is proposed to the CPM for consideration.

- Staff. Staff found the applicant had not accounted for the possibility that more than one monitor could be present and has added the plural to the condition and the verification. The applicant had made changes in the verification that were not marked as a change in their submittal. The applicant's changes agree to the stipulation that monitors must be approved by the CPM. Staff has modified portions of the verification to reflect how training for Biological Monitors shall be implemented, but is not concerned about verifying the monitors are trained.
- The Designated Biologist shall perform the following during any site or related facilities mobilization, ground disturbance, grading, construction, operation, and closure activities. The Designated Biologist may be assisted by a Biological Monitor(s).
 - 1. Advise the project owner's Construction Manager and Operation Manager, supervising construction engineer and operations engineer on the implementation of the biological resources conditions of certification;
 - 2. Be available to supervise or conduct mitigation, monitoring, and other biological resources compliance efforts, particularly in areas requiring avoidance or containing sensitive biological resources, such as wetlands and special status species or their habitat;

- Clearly mark sensitive biological resource areas and inspect these areas at appropriate intervals for compliance with regulatory terms and conditions:
- 4. Inspect active construction areas where animals may have become trapped prior to construction commencing each day. At the end of the day, inspect for the installation of structures that prevent entrapment or allow escape during periods of construction inactivity. Periodically inspect areas with high vehicle activity (parking lots) for animals in harms way;
- 5. Notify the project owner and the CPM of any non-compliance with any biological resources Condition of Certification; and
- 6. Respond directly to inquiries of the CPM regarding biological resource issues.

<u>Verification:</u> The Designated Biologist shall maintain written records of the tasks described above, and summaries of these records shall be submitted in the Monthly Compliance Reports (MCRs). <u>The Biological Monitor(s) shall be approved by the CPM. Biological Monitor(s) training shall include familiarity with the Conditions of Certification and the monitoring procedures established in the BRMIMP. During project operation, the Designated Biologist shall submit summaries of the tasks described above in the Annual Compliance Report.</u>

- BIO-3 The applicant's proposed changes are very similar to those proposed by Staff. Staff notes that the Applicant's wording at the end of the first paragraph unduly separated the verb and subject, and Staff's suggested wording would result in less ambiguity. Staff found the applicant had not accounted for the possibility that more than one monitor could be present and has added the plural to the condition.
- The project owner's Construction Manager and Operation Manager shall act on the advice of the Designated Biologist or Biological Monitor(s) to ensure conformance with the biological resources conditions of certification. If required by the Designated Biologist or Biological Monitor(s), the project owner's Construction Manager or Operation manager shall halt all site mobilization, ground disturbance, grading, construction, and operation activities in areas specified by the Designated Biologist as sensitive or which may affect a sensitive area or species.

The Designated Biologist and Biological Monitor(s) shall:

- Require a halt to all activities in any area when it is determined that there
 would be an adverse impact to <u>sensitive</u> biological resources if the
 activities continued;
- 2. Inform the project owner, the Construction Manager and the Operation Manager when to resume activities; and
- Notify the CPM if there is a halt of any activities, and advise the CPM of any corrective actions that have been taken, or will be instituted, as a result of the halt.

<u>Verification:</u> The Designated Biologist must notify the CPM and the project owner immediately (and no later than the following morning of the incident, or Monday morning in the case of a weekend) of any non-compliance or a halt of any site mobilization, ground disturbance, grading, construction, and operation activities. The project owner shall notify the CPM of the circumstances and actions being taken to resolve the problem.

Whenever corrective action is taken by the project owner, a determination of success or failure will be made by the CPM within five working days after receipt of notice that corrective action is completed, or the project owner will be notified by the CPM that coordination with other agencies will require additional time before a determination can be made.

- Staff agrees with the applicant's proposed changes to this condition.

 Staff's proposed Condition of Certification BIO-4 is hereby revised to read:
- BIO-4 The project owner shall develop and implement a CPM approved Worker Environmental Awareness Program (WEAP) in which each of its employees, as well as employees of contractors and subcontractors who work on the project site or any related facilities during site mobilization, ground disturbance, grading, construction, operation and closure are informed about sensitive biological resources associated with the project. The training may be in the form of a video if administered by a person approved by the Designated Biologist.

The WEAP must:

- 1. Be developed by or in consultation with the Designated Biologist and consist of an on-site or training center presentation in which supporting written material is made available to all participants;
- 2. Discuss the locations and types of sensitive biological resources on the project site and adjacent areas;
- 3. Present the reasons for protecting these resources;
- 4. Present the meaning of various temporary and permanent habitat protection measures;
- 5. Identify whom to contact if there are further comments and questions about the material discussed in the program; and
- 6. Include a training acknowledgment form to be signed by each worker indicating that they received training and shall abide by the guidelines.

The specific program can be administered by a competent individual(s) acceptable to the Designated Biologist.

<u>Verification:</u> At least 60 days prior to the start of any site or related facilities mobilization, the project owner shall submit to the CPM two copies of the WEAP and all supporting written materials prepared or reviewed by the Designated Biologist and a resume of the person(s) administering the program.

The project owner shall submit in the MCR the number of persons who have completed the training in the prior month and a running total of all persons who have completed the training to date.

The signed training acknowledgement forms <u>from construction</u> shall be kept on file by the project owner for a period of at least six months after the start of commercial operation.

During project operation, signed statements for active project operational personnel shall be kept on file for six months following the termination of an individual's employment.

- BIO-5 The applicant's proposed changes are very similar to those proposed by Staff. Staff has added a timeline for revisions of the BRMIMP for ease of compliance.
- The project owner shall submit two copies of the proposed BRMIMP to the CPM for review and approval and to CDFG and USFWS for review and comment prior to the start of any site or related facilities mobilization and shall implement the measures identified in the approved BRMIMP.

The final BRMIMP shall identify:

- 1. All biological resources mitigation, monitoring, and compliance measures proposed and agreed to by the project owner;
- 2. All Biological Resource Condition of Certification identified in the Commission's Final Decision;
- All biological resource mitigation, monitoring and compliance measures
 required in federal agency terms and conditions, such as those provided in
 the USACE permit and as a result of informal consultation between the
 applicant and the USFWS;
- All biological resources mitigation, monitoring and compliance measures required in other state agency terms and conditions, such as those provided in the RWQCB permit;
- 5. All biological resources mitigation, monitoring and compliance measures required in local agency permits, such as site grading, noise, lighting, and landscaping requirements;
- All incidental take minimization measures as provided in the Stephens' kangaroo rat HCP or as specified by the Stephens' kangaroo rat Habitat Conservation Agency;
- 7. All sensitive biological resources to be impacted, avoided, or mitigated by project construction, operation and closure;
- 8. All required mitigation measures for each sensitive biological resource;
- 9. Required habitat compensation strategy, including provisions for acquisition, enhancement, and management for any temporary and permanent loss of sensitive biological resources;

- 10. A detailed description of measures that will be taken to avoid or mitigate temporary disturbances from construction activities;
- 11. All locations on a map, at an approved scale, of sensitive biological resource areas subject to disturbance and areas requiring temporary protection and avoidance during construction;
- 12. Aerial photographs, at an approved scale, of all areas to be disturbed during project construction activities - one set prior to any site or related facilities mobilization disturbance and one set subsequent to completion of mitigation measures. Include planned timing of aerial photography and a description of why times were chosen;
- 13. Duration for each type of monitoring and a description of monitoring methodologies and frequency;
- 14. Performance standards to be used to help decide if/when proposed mitigation is or is not successful;
- 15. All remedial measures to be implemented if performance standards are not met:
- 16. A <u>preliminary</u> discussion of potential biological-resources-related facility closure measures;
- 17. A process for proposing plan modifications to the CPM and appropriate agencies for review and approval; and
- 18. A copy of all biological resources related permits.

<u>Verification:</u> The project owner shall submit the specified document at least 60 days prior to start of any site or related facilities mobilization.

The CPM, in consultation with the CDFG, the USFWS and any other appropriate agencies, will determine the BRMIMP's acceptability within 45 days of receipt. If there are any permits that have not yet been received when the BRMIMP is first submitted, these permits shall be submitted to the CPM and USFWS within ten (10) days of their receipt and the BRMIMP shall be revised or supplemented to reflect the permit conditions within twenty (20) days of their receipt.

The project owner shall notify the CPM no less than five working days before implementing any modifications to the approved BRMIMP to obtain CPM approval.

Any changes to the approved BRMIMP must also be approved by the CPM in consultation with CDFG, the USFWS and appropriate agencies to ensure no conflicts exist.

Within 30 days after completion of project construction, the project owner shall submit to the CPM, for review and approval, a written report identifying which items of the BRMIMP have been completed, a summary of all modifications to mitigation measures made during the project's site mobilization, ground disturbance, grading, and construction phases, and which mitigation and monitoring items are still outstanding.

- **BIO-6** No changes were proposed by the applicant or by staff.
- BIO-6 The project owner will incorporate into the permanent or unexpected permanent closure plan, and the BRMIMP, measures that address the local biological resources.

The planned permanent or unexpected permanent closure plan will address the following biological resources related mitigation measures (typical measures are):

- 1. Removal of transmission conductors when they are no longer used and useful:
- 2. Removal of all power plant site facilities and related facilities;
- 3. Measures to restore wildlife habitat to promote the re-establishment of native plant and wildlife species; and
- 4. Revegetation of the plant site and other disturbed areas utilizing appropriate seed mixture.

<u>Verification:</u> At least 12 months prior to commencement of closure activities, the project owner shall address all biological resources related issues associated with facility closure in a Biological Resources Element. The Biological Resources Element will be incorporated into the Facility Closure Plan and the BRMIMP and include a complete discussion of the local biological resources and proposed facility closure mitigation measures.

- BIO-7 No changes were proposed by the applicant or by staff.
- BIO-7 The project owner will acquire the Regional Water Quality Control Board Section 401 Clean Water Act certification, and incorporate the biological resource related terms and conditions into the project's BRMIMP.

<u>Verification:</u> At least 30 days prior to the start of any site or related facilities mobilization activities, the project owner will submit to the CPM a copy of the final Regional Water Quality Control Board's certification.

- BIO-8 No changes were proposed by the applicant or by staff.
- BIO-8 The project owner shall submit to the CPM a final copy of the U.S. Army Corps of Engineers Section 404 of the federal Clean Water Act permit. The biological resources related terms and conditions contained in the permit shall be incorporated into the project's BRMIMP.

<u>Verification:</u> At least 30 days prior to the start of any site or related facilities mobilization, the project owner shall submit to the CPM a copy of the U.S. Army Corps of Engineers permit.

BIO-9 The applicant's proposed changes are very similar to those proposed by Staff. The applicant's proposal may have left out the word "features" since the proposal does not grammatically flow as presented.

- BIO-9 The project owner shall modify the project design to incorporate all feasible measures that avoid or minimize impacts to the local biological resources.
 - Design transmission line poles, access roads, pulling sites, and storage and parking areas to avoid identified sensitive resources. If, in the final design plans, the 500kV or the 115 kV transmission lines are located within four feet of site MW-51, potential impacts to listed fairy shrimp shall be reevaluated by the CPM in coordination with the USFWS.
 - 2.2. Screen the water intake pipes that use natural waterways in a manner to avoid entrainment;
 - 3.2. Avoid wetland loss as defined in the Western Riverside County

 Multi-Species Habitat Conservation Plan or loss of jurisdictional features
 as defined by the U.S. Army Corps of Engineers; and
 - 4.3. Design and construct transmission lines and all electrical components to reduce the likelihood of electrocutions of large birds.

<u>Verification:</u> All mitigation measures and their implementation methods will be included in the BRMIMP.

- BIO-10 No changes were proposed by the applicant or by staff.
- BIO-10 The project owner shall manage their construction site, and related facilities, in a manner to avoid or minimize impacts to the local biological resources.

Typical and site specific measures shall include:

- Temporarily fence and provide wildlife escape ramps for construction areas that contain steep walled holes or trenches if outside of an approved, permanent exclusionary fence. The temporary fence will be hardware cloth or similar materials that are approved for use by USFWS and CDFG;
- 2. Make certain all food-related trash will be disposed of in closed containers and removed at least once a week. Feeding of wildlife shall be prohibited;
- 3. Prohibit non-security related firearms or weapons from being brought to the site;
- 4. Prohibit pets from being brought to the site;
- 5. Report all inadvertent deaths of sensitive species to the appropriate project representative. Injured animals will be reported to CDFG and the project owner will follow instructions that are provided by CDFG;
- Protect potential vernal pool fairy shrimp habitat identified as site MW-51 from sedimentation or wind (aeolic) deposition originated by project construction;
- 7. Access to the 0.9-mile transmission line when adjacent to the MW-51shall be restricted to the west of the existing and new 500-kV lattice towers;

- 8. Eliminate any California Exotic Pest Plants of Concern (CalEPPC) List A species from landscaping plans;
- 9. Use native, drought tolerant species in the restoration of land temporarily disturbed during the installation linear underground facilities;
- Restore temporarily disturbed sites to their pre-existing physical condition;
 and
- 11. In areas that potentially support vernal pool fairy shrimp, the applicant will perform the following measures.
 - Biological impacts to potential fairy shrimp habitat shall be minimized to the maximum extent possible by siting facilities away from such sensitive habitats, within disturbed agricultural fields, adjacent to or within existing road or established utility rights-of-way.
 - Prior to the start of any construction activities in the vicinity of MW-51 (potential vernal pool fairy shrimp habitat), a qualified biologist will delineate and flag the boundaries of the feature.
 - K-rail concrete barriers will be installed around the MW-51 feature to protect the feature from construction activities. There shall be a minimum of four feet of clearance between the barrier and the MW-51 feature. The barrier will be continuous around the MW-51 feature only insofar as it does not interfere with the hydrology of the feature. If it is necessary to allow breaks in the barrier to maintain existing hydrology then the concrete barrier will be substituted with fencing in these segments.
 - Construction within the area, which drains into MW-51, will be conducted during dry weather.
 - Trenching adjacent to MW-51 will be done by hand.
 - Ephemeral drainages will be restored to pre-construction topography/contours and compaction immediately following construction and installation activities. Furthermore, the proposed disturbance to such features may not affect (i.e., act as a barrier to) existing surrounding hydrologic conditions.

<u>Verification:</u> All mitigation measures and their implementation methods will be included in the BRMIMP.

- BIO-11 No changes were proposed by the applicant or by staff.
- Prior to site or related facilities mobilization, the IEEC shall comply with the provisions of Riverside County Ordinance No. 663, which requires the payment of fees for permanent and temporary loss of historical Stephens' kangaroo rat habitat within the Stephens' kangaroo rat HCP fee assessment area. The applicant shall purchase habitat credits for temporary impacts to 36.13 acres and permanent impacts to 38.60 acres. Fees shall be based on

the most current fees assessed by Riverside County. Monies will be paid directly to the Riverside County Habitat Conservation Agency.

<u>Verification:</u> At least 30 days prior to site or related facilities mobilization, the project owner shall demonstrate to the CPM evidence of receipt of payment of the Stephens' kangaroo rat habitat fee by the County of Riverside. At least 30 days prior to site mobilization (or other CPM-approved timeframe), the project owner shall submit to the CPM a written certificate or letter from the County of Riverside stating the date and amount of funds received.

- BIO-12 No changes were proposed by the applicant or by staff.
- Prior to site or related facilities mobilization the applicant shall pay an Interim Open Space Mitigation Fee in the amount assessed in accordance with Riverside County Ordinance No. 810 to assist in providing revenue to acquire and preserve open space and habitat (Riverside 2002a). The amount of the fee shall be based on permanent impacts to 38.6 acres using the most current fee rates for industrial projects under this Ordinance. Any area identified as "no use proposed" on the approved exhibit A (i.e., the applicant's AFC, Calpine 2001a) shall not be included in the project area (Riverside 2002a).

<u>Verification:</u> At least 30 days prior to site or related facilities mobilization, the project owner shall submit to the CPM, documentation that payment has been made to the County of Riverside, for the Interim Open Space Mitigation Fee. At least 30 days prior to site or related facilities mobilization (or other CPM-approved timeframe), the project owner shall provide a letter from the County of Riverside stating the date and amount of funds received for open space and habitat mitigation.

- BIO-13 No changes were proposed by the applicant or by staff.
- Prior to site or related facilities mobilization the project owner shall enter into a legally binding agreement with Southern California Edison (SCE), or its successor, regarding construction and maintenance of the transmission line between the Inland Empire Energy Center and the Valley substation. The agreement shall include the measures identified in the BRMIMP and conditions of certification BIO-5 and BIO-10. The agreement shall also allow the CPM access to the transmission line corridor throughout construction and operation. The project owner is ultimately responsible for implementation of all mitigation measures associated with the 0.9 mile transmission line.

<u>Verification:</u> At least 30 days prior to site or related facilities mobilization along the transmission line corridor, the project owner shall submit to the CPM a copy of the initial agreement between the parties for review and approval. Any proposal to enter into a subsequent agreement will be submitted 30 days in advance of its execution to the CPM for review and approval in consultation with appropriate state, federal, or local authorities. The agreement may be terminated at any time; provided that the terminated agreement is replaced by another agreement with complies with the requirements set forth and is effective immediately upon termination of the prior agreement.

CULTURAL RESOURCES

CONDITIONS OF CERTIFICATION

Staff agrees to the following changes to the Conditions of Certification:

Prior to the start of ground disturbance, the project owner shall obtain the services of a **Cultural Resources Specialist (CRS)**, and one or more alternates, if alternates are needed, to manage all monitoring, mitigation and curation activities. The CRS may elect to obtain the services of **Cultural Resource Monitors (CRMs)** and other technical specialists, if needed, to assist in monitoring, mitigation and curation activities. The project owner shall ensure that the CRS evaluates any cultural resources that are newly discovered or that may be affected in an unanticipated manner for eligibility to the California Register of Historic Resources (CRHR).

CULTURAL RESOURCES SPECIALIST

The resume for the CRS and alternate(s) shall include information demonstrating that the minimum qualifications specified in the U.S. Secretary of Interior Guidelines, as published in the Code of Federal Regulations, 36 CFR Part 61 are met. In addition, the CRS shall have the following qualifications:

- a technical specialty appropriate to the needs of the project and a background in anthropology, archaeology, history, architectural history or a related field; and
- 2. at least three years of archaeological or historic, as appropriate, resource mitigation and field experience in California.

The resume of the CRS shall include the names and telephone numbers of contacts familiar with the work of the CRS on referenced projects, and demonstrate that the CRS has the appropriate education and experience to accomplish the cultural resource tasks that must be addressed during ground disturbance, grading, construction and operation. In lieu of the above requirements, the resume shall demonstrate to the satisfaction of the CPM, that the proposed CRS or alternate has the appropriate training and background to effectively implement the conditions of certification.

CULTURAL RESOURCES MONITOR

CRMs shall have the following qualifications:

- 1. a BS or BA degree in anthropology, archaeology, historic archaeology or a related field and one year experience monitoring in California; or
- 2. an AS or AA degree in anthropology, archaeology, historic archaeology or a related field and four years experience monitoring in California; or

3. enrollment in upper division classes pursuing a degree in the fields of anthropology, archaeology, historic archaeology or a related field and two years of monitoring experience in California.

<u>Verification:</u> The project owner shall submit the resume for the CRS, and alternate(s) if desired, at least 45 days prior to the start of ground disturbance to the CPM for review and approval.

At least 10 days prior to a termination or release of the CRS, the project owner shall submit the resume of the proposed new CRS to the CPM for review and approval.

At least 20 days prior to ground disturbance, the CRS shall submit written notification to the CPM identifying anticipated CRMs for the project stating they meet the minimum qualifications required by this condition. If additional CRMs are needed later, the CRS shall submit written notice one week prior to any new CRMs beginning work.

At least 10 days prior to the start of ground disturbance, the project owner shall confirm in writing to the CPM that the approved CRS will be available for onsite work and is prepared to implement the cultural resources conditions of certification.

CUL-2 Prior to the start of ground disturbance, the project owner shall provide the CRS and the CPM with maps and drawings showing the footprint of the power plant and all linear facilities. Maps shall include the appropriate USGS quadrangles and a map at an appropriate scale (e.g., 1:2000 or 1" = 200') for plotting individual artifacts. If the CRS requests enlargements or strip maps for linear facility routes, the project owner shall provide copies to the CRS and CPM.

If the footprint of the power plant or linear facilities changes, the project owner shall provide maps and drawings reflecting these changes, to the CRS and the CPM for approval. Maps shall identify all areas of the project where ground disturbance is anticipated.

If construction of the project would proceed in phases, maps and drawings, not previously provided, shall be submitted prior to the start of each phase. Written notification identifying the schedule of each project phase shall be provided to the CRS and CPM.

At a minimum, the CRS shall consult weekly with the project construction manager to confirm area(s) to be worked during the next week, until ground disturbance is completed.

The project owner shall notify the CRS and CPM of any changes to the scheduling of the construction phases.

<u>Verification:</u> The project owner shall submit the subject maps and drawings at least 30 40 days prior to the start of ground disturbance.

If there are changes to any project related footprint, revised maps and drawings shall be provided at least 1015 days prior to start of ground disturbance for those changes.

If project construction is phased, if not previously provided, the project owner shall submit the subject maps and drawings 15 days prior to each phase.

A current schedule of anticipated project activity shall be provided to the CRS on a weekly basis during ground disturbance and also provided in each Monthly Compliance Report (MCR).

The project owner shall provide written notice of any changes to scheduling of construction phases within five days of identifying the changes.

CUL- 3 Cultural resource monitoring shall be conducted during the initial groundbreaking at the plant site and on project linears. The potential for encountering buried deposits shall be assessed by the CRS based on the initial groundbreaking observations. The initial assessment shall prescribe the type (intermittent to full time), location and duration for monitoring of ground disturbance within the plant site and on project linears and the CPM has concurred with that determination.

The cultural resource monitoring shall continue until the CRS determines that no cultural resources will be impacted by continued construction.

Monitors shall keep a daily log of any monitoring or cultural resource activities, submitted weekly, and the CRS shall prepare a weekly monthly summary report on the progress or status of cultural resources-related activities. The CRS may informally discuss cultural resource monitoring and mitigation activities with Energy Commission technical staff.

The CRS and the project owner shall notify the CPM by telephone or e-mail of any incidents of non-compliance with the conditions of certification and/or applicable LORS within 24 hours of becoming aware of the situation. The CRS shall also recommend corrective action to resolve the problem or achieve compliance with the conditions of certification.

Cultural resources monitoring activities are the responsibility of the CRS. Any interference with monitoring activities, removal of a monitor from duties assigned by the CRS or direction to a monitor to relocate monitoring activities by anyone other than the CRS shall be considered non-compliance with these conditions of certification

A Native American monitor shall be obtained, at a minimum on an on-call basis, to monitor ground disturbance in areas where Native American artifacts are discovered. Informational lists prepared by the Native American Heritage Commission of concerned Native Americans shall be obtained. Preference in selecting a monitor shall be given to Native Americans with traditional ties to the area that will be monitored.

<u>Verification:</u> Within five (5) days after the initial groundbreaking, the CRS or alternate CRS will provide a letter (electronic or paper) to the CPM and the project owner of the assessment of the initial groundbreaking observations, including the type (intermittent to full time) and duration of cultural resources monitoring for review and approval by the CPM. Monitoring shall not be completed, until the CRS has determined that continued construction will not result in an impact to cultural resources and has provided a letter stating so to the CPM and the project owner.

<u>During the ground disturbance phases of the project, all daily logs will be submitted on a weekly basis to the CPM either through email, fax, or hard copy.</u> During the ground disturbance phases of the project, the project owner shall include in the MCR to the CPM copies of the <u>weekly monthly</u> summary reports prepared by the CRS regarding project-related cultural resources monitoring. Copies of daily logs shall be retained and made available for audit by the CPM as needed.

Within 24 hours of recognition of a non-compliance issue with the conditions of certification and/or applicable LORS, the CRS and the project owner shall notify the CPM by telephone of the problem and of steps being taken to resolve the problem. The telephone call shall be followed by an e-mail or fax detailing the non-compliance issue and the measures necessary to achieve resolution of the issue. Daily logs shall include forms detailing any instances of non-compliance. In the event of any non-compliance issue, a report written no sooner than two weeks and no later than six weeks after a non-compliance incident that describes the issue, resolution of the issue and the effectiveness or the resolution measures, and shall be provided in the MCR following completion of the report.

When Native American artifacts are found, the project owner shall send notification to the CPM identifying the person(s) retained at a minimum, on an on-call basis to conduct Native American monitoring. If efforts to obtain the services of a qualified Native American monitor are unsuccessful, the project owner shall immediately inform the CPM who will initiate a resolution process.

CUL-4 The project owner shall submit the Cultural Resources Report (CRR) to the CPM for approval. The CRR shall be written by the CRS and shall be provided in the Archaeological Resources Management Report (ARMR) format. The CRR shall report on all field activities including dates, times and locations, findings, samplings and analysis. All survey reports, DPR 523 forms and additional research reports not previously submitted to the California Historic Resource Information System (CHRIS) shall be included as an appendix to the CRR.

<u>Verification:</u> The project owner shall submit the CRR within 90 days after completion of ground disturbance (including landscaping). Within 10 days after CPM approval, the project owner shall provide documentation to the CPM that copies of the CRR have been provided to the State Historic Preservation Officer (SHPO), the CHRIS and the curating institution (if archaeological materials were collected).

CUL-5 Prior to and for the duration of ground disturbance, the project owner shall provide Worker Environmental Awareness Program (WEAP) training to all

new workers within their first week of employment. The training may be presented in the form of a video. The training shall include:

- 1. a discussion of applicable laws and penalties under the law;
- 2. samples or visuals of artifacts that might be found in the project vicinity;
- information that the CRS, alternate CRS or CRM has the authority to halt construction in the event of a discovery or unanticipated impact to a cultural resource;
- instruction that employees are to halt work on their own in the vicinity of a
 potential cultural resources find, and shall contact their supervisor and the
 CRS or CRM; redirection of work would be determined by the construction
 supervisor and the CRS;
- 5. an informational brochure that identifies reporting procedures in the event of a discovery;
- 6. an acknowledgement form signed by each worker indicating that they have received the training; and
- 7. a sticker that shall be placed on each employee's hard hat indicating that that employee has completed environmental training.

<u>Verification:</u> The project owner shall provide in the Monthly Compliance Report the WEAP Certification of Completion form of workers who have completed the training in the prior month and a running total of all workers who have completed training to date.

The project owner shall grant authority to halt construction to the CRS, alternate CRS and the CRMs in the event previously unknown cultural resource sites or materials are encountered, or if known resources may be impacted in a previously unanticipated manner (discovery). Redirection of ground disturbance shall be accomplished under the direction of the construction supervisor in consultation with the CRS.

In the event <u>of a discovery</u>cultural resources are found or previously unanticipated impacts are expected, the halting or redirection of construction shall remain in effect until <u>the CRS has determined the discovery is categorically treated as not significant as defined in the research design below, or all of the following have occurred:</u>

- 1. the CRS has notified the project owner, and the CPM has been notified within 24 hours or by Monday morning if the cultural resources discovery occurs between 8:00 AM on Friday and 8:00 AM on Sunday morning, including a description of the discovery (or changes in character or attributes), the action taken (i.e. work stoppage or redirection), a recommendation of eligibility and recommendations for mitigation of any cultural resources discoveries whether or not a determination of significance has been made of the find description and the work stoppage;
- 2. the CRS, the project owner, and the CPM have conferred and determined what, if any, data recovery or other mitigation is needed; and

3. any necessary data recovery and mitigation has been completed.

A research design shall be prepared to identify the information values that may be contained in typical a cultural resource deposit. The research design shall provide guidance for determining the significance of cultural resource deposits and provide a list of those resources that shall be categorically treated as not significant. The design shall provide justification for decisions on significance and methodology for determining the age of deposits.

<u>Verification:</u> At least 30 days prior to the start of ground disturbance, the project owner shall provide the CPM with a letter confirming that the CRS, alternate CRS and CRMs have the authority to halt construction activities in the vicinity of a cultural resource find, and that the CRS or project owner shall notify the CPM immediately (no later than the following morning of the incident or Monday morning in the case of a weekend) of any halt of construction activities, including the circumstance and proposed mitigation measures. The project owner shall provide the CRS with a copy of the letter granting the authority to halt construction.

At least 30 days prior to the start of ground disturbance, the project owner shall provide the CPM a research design developed by the CRS for review and approval.

Ffollowing the filing of the CPM-approved CRR with the appropriate entities, the project owner shall ensure that all cultural resource materials, maps, and data collected during data recovery and mitigation for the project are delivered to a public repository that meets the U.S. Secretary of Interior requirements for the curation of cultural resources. The project owner shall pay any fees for curation required by the repository.

<u>Verification:</u> The project owner shall ensure that all recovered cultural resource materials are delivered for curation within <u>30 thirty</u> days after providing the CPM-approved CRR.

For the life of the project, the project owner shall maintain in its compliance files copies of signed contracts or agreements with the public repository to which the project owner has delivered for curation all cultural resource materials collected during data recovery and mitigation for the project.

HAZARDOUS MATERIALS

CONDITIONS OF CERTIFICATION

Staff agrees to the following changes to the Conditions of Certification:

The project owner shall not use any hazardous materials not listed in Appendix C, below, or in greater quantities than those identified by chemical name in Appendix C, below, unless approved in advance by Riverside County and the CPM.

<u>Verification:</u> The project owner shall provide to the Compliance Project Manager (CPM), in the Annual Compliance Report, a list of hazardous materials contained at the facility in reportable quantities.

HAZ-2 The project owner shall provide a Business Plan to the Certified Unified Program Authority (CUPA) (Riverside County Environmental Health Department) for review and to the CPM for review. The project owner shall also provide a Risk Management Plan (RMP) to the CUPA and the CPM for review at the time the RMP is first submitted to the U.S. Environmental Protection Agency (EPA). After receiving comments from the CUPA and the CPM, the project owner shall reflect all recommendations in the final documents. Copies of the final Business Plan and RMP shall be provided to the CUPA and EPA for information and to the CPM for approval.

<u>Verification:</u> At least <u>60_45</u> days prior to receiving any hazardous material on the site, the project owner shall provide a copy of a final Business Plan to the CPM for approval. At least 60 days prior to delivery of aqueous ammonia to the site, the project owner shall provide the final RMP to the CUPA for information and to the CPM for approval.

HAZ-3 The project owner shall develop and implement a Safety Management Plan for delivery of aqueous ammonia. The plan shall include procedures, protective equipment requirements, training and a checklist. It shall also include a section describing all measures to be implemented to prevent mixing of aqueous ammonia with incompatible hazardous materials.

<u>Verification:</u> At least <u>30 60</u> days prior to the initial delivery of aqueous ammonia to the facility, the project owner shall provide a safety management plan as described above to the CPM for review and approval.

The aqueous ammonia storage facility shall be designed to either the ASME Boiler & Pressure Vessel Code and ANSI K61.1 or to API 620. In either case, a secondary containment basin capable of holding 125% of the storage volume of the largest tank or the largest tank volume plus the volume associated with 24 hours of rain assuming the 25-year storm, shall be provided to contain any releases from the storage tanks.

<u>Verification:</u> At least <u>30 60</u> days prior to the initial delivery of aqueous ammonia to the facility, the project owner shall submit final design drawings and specifications for

the ammonia storage tank and secondary containment basin to the CPM for review and approval.

HAZ-5 The project owner shall ensure that no flammable material is stored within 50 feet of the sulfuric acid tank

<u>Verification:</u> At least <u>30 60</u> days prior to initial receipt of sulfuric acid on-site, the Project Owner shall provide copies of the facility design drawings showing the location of the sulfuric acid storage tank and the location of any tanks, drums, or piping containing any combustible or flammable materials

The project owner shall require that the gas pipeline undergo a complete design review and detailed inspection 30 years after initial startup and every 5 years thereafter. Those portions of the natural gas pipeline that are owned by a regulated public utility which is subject to a substantively similar requirement shall not be subject to this condition.

<u>Verification:</u> At least 30 days prior to the initial flow of gas in the pipeline, the project owner shall provide an outline of the pipeline design plan to accomplish a full and comprehensive pipeline design review to the CPM for review and approval. The full and complete plan shall be amended, as appropriate, and submitted to the CPM for review and approval, not later than one year before the plan is implemented by the project owner.

HAZ-7 After any significant seismic event in the area where surface rupture occurs within one mile of the pipeline, the gas pipeline shall be inspected by the project owner. Those portions of the natural gas pipeline that are owned by a regulated public utility which is subject to a substantively similar requirement shall not be subject to this condition.

<u>Verification:</u> At least 30 days prior to the initial flow of gas in the pipeline, the project owner shall provide a detailed plan to accomplish a full and comprehensive pipeline inspection in the event of an earthquake to the CPM for review and approval. This plan shall be amended, as appropriate, and submitted to the CPM for review and approval, at least every five years.

HAZ-8 The project owner shall direct all vendors delivering aqueous ammonia to the site to use only tanker truck transport vehicles which meet or exceed the specifications of DOT Code MC-307.

<u>Verification:</u> At least 30_60 days prior to the first receipt of aqueous ammonia on site, the project owner shall submit copies of the notification letter to supply vendors indicating the transport vehicle specifications to the CPM for review and approval.

HAZ-9 The project owner shall ensure that the hydrogen gas storage cylinders are stored in an area out of the plane of the turbines and that no combustible or flammable material is stored within 50 feet of the hydrogen cylinders. per the clearance requirements of NFPA 50A.

<u>Verification:</u> At least 30 60 days prior to the first receipt of hydrogen gas on-site, the Project Owner shall provide copies of the facility design drawings showing the location of the hydrogen gas cylinders and the location of any tanks, drums, or piping containing

any combustible or flammable material. and the route by which such materials will be transported through the facility.

HAZ-10 The project owner shall direct all vendors delivering any hazardous material to the site to use only the route approved by the CPM (I-215 to Ethanac Road to Antelope Road and then into the facility). The project owner shall obtain approval of the CPM if an alternate route is desired.

<u>Verification:</u> At least <u>30 60</u> days prior to the first receipt of any hazardous materials on site, the project owner shall submit copies of the required transportation route limitation direction to the CPM for review and approval.

HAZ-11 The project owner shall direct all vendors <u>delivering carrying</u> any <u>liquid</u> hazardous materials <u>greater than 500 gallons</u> not to deliver during the time in the mornings and afternoons when children are going to and from school. The project owner shall coordinate with any present or future schools near the facility regarding the times when students may be traveling in the transportation route area.

<u>Verification:</u> At least <u>30 60</u> days prior to the first receipt of any hazardous materials on site, the project owner shall submit documentation to the CPM identifying the hours that delivery of hazardous materials may and may not take place.

HAZ-12 The project owner shall ensure that the construction, operation and maintenance of the natural gas pipeline is done in compliance with Public Utilities Commission General Order 112-E and 58-A standards, and Federal Department of Transportation (DOT) regulations, Title 49, Code of Federal Regulations (CFR), Parts 190, 191, and 192. Those portions of the natural gas pipeline that are owned by a regulated public utility which is subject to a substantively similar requirement shall not be subject to this condition.

<u>Verification:</u> At least 30 days prior to the construction of the gas pipeline, the project owner shall provide proof that the above regulations will be complied with to the CPM

LAND USE

CONDITIONS OF CERTIFICATION

LAND-1 Prior to the start of construction, the project owner shall obtain the necessary approval(s) from the County and complete any lot merger or lot line adjustments necessary to ensure that the proposed project, including associated facilities, improvements and buffer areas which would allow adjacent parcels to be developed to their full extent as presently zoned, will be located on a single legal lot.

<u>Verification:</u> 30 days prior to the start of construction, the Project Owner shall provide the CPM with proof of completion of the above adjustments or satisfactory evidence that no such adjustments are necessary.

NOISE AND VIBRATION

The following Staff testimony identifies several errors contained in the Applicant's testimony.

A typographical error in Table 7.2.1 indicates that Location 1, which was used for the noise survey, is northeast of the IEEC; this location is northwest of the IEEC, as correctly described on the previous page, first bulleted line, of Applicant's testimony.

The Applicant provided a discussion of the impact from construction noise which is acceptable to staff. Construction noise will be audible in many areas of the community, but in the presence of traffic noise and other noise sources, the IEEC noise should not be objectionable. Construction activity is to be limited by staff's proposed Condition of Certification **NOISE-8** to the hours of 7 am to 7 pm on weekdays and from 8 am to 5 pm on weekends or holidays.

In Table 7.2.3, the Applicant has compared the high-pressure steam blow noise levels with the daytime L_{eq} level. This is an acceptable comparison.

In Table 7.2-4, the Applicant has compared the low-pressure steam blow noise levels, which are a constant value, to the ambient CNEL values. The low-pressure steam blow levels should be compared to the nighttime L_{90} level (in this case, a 6-hour average L_{90} was employed). CNEL is not an appropriate descriptor for the background ambient to determine impact from a continuous noise source. Staff's testimony in the FSA specified 40 dBA as an appropriate nighttime ambient level for the Romoland residential area, based on the Applicant's ambient noise measurements in the AFC. The locations that could be affected by the low-pressure steam blow process are DP-1, DP-2 and the two additional locations where the predicted steam-blow noise levels are 42, 36, 38, and 32 dBA respectively. For these locations, the combined ambient levels would be 44, 37, 39, and 33 dBA. At the four locations, this would result in a 4, 1, 2, and 1 dBA increase in background level. This is not a significant increase, but the noise from the plant would likely be noticed near location 1 during the quietest nighttime periods.

The Applicant's discussion of noise impact during plant operations utilized a similar analysis, although in this case, in Table 7.2-6, a CNEL value for the predicted noise level during plant operation was compared to an ambient CNEL value. Staff maintains that this is still not an appropriate comparison. A continuous noise source should be compared to the hourly L_{90} value for the ambient, and in this case it should be compared to the lowest 6-hour nighttime L_{90} ,which was determined to be 40 dBA. As stated in the FSA, the combined hourly level at the quietest time of day would be 45 to 46 dBA, an increase of 5 to 6 dBA above the ambient. This is not considered to be a significant impact, but the plant noise will likely be noticed at the nearest residences during the quietest periods of the night.

In Table 7.2-8, the Applicant also made a comparison to the average nighttime L_{90} , though the values used do not agree with those contained in the AFC. In the AFC, the L_{90} values for the lowest 6 hours were 42.2 and 38.6 dBA respectively at Locations 1

and 2. These values were used by Staff to obtain the 40 dBA value suggested for the nighttime ambient at most community locations.

The Applicant discussed the impact from low frequency noise. This discussion is acceptable and Staff agrees that there should be no low frequency noise impact from this project.

The Applicant proposed a minor change to the COC **NOISE-8** which is acceptable to staff.

In conclusion, as stated in the AFC, Staff believes that the noise impact from the IEEC will be less than significant. Noise from the project will very likely be audible at many community locations, though the levels will be less than 6 dBA above the background ambient and thus should not be objectionable.

CONDITIONS OF CERTIFICATION

Staff agrees to the following changes to the Conditions of Certification:

NOISE-1 At least 15 days prior to the start of ground disturbance, the project owner shall notify all residents within one-half mile of the site and the linear facilities, by mail or other effective means, of the commencement of project construction. At the same time, the project owner shall establish a telephone number for use by the public to report any undesirable noise conditions associated with the construction and operation of the project. If the telephone is not staffed 24 hours per day, the project owner shall include an automatic answering feature, with date and time stamp recording, to answer calls when the phone is unattended. This telephone number shall be posted at the project site during construction in a manner visible to passersby. This telephone number shall be maintained until the project has been operational for at least one year.

<u>Verification:</u> Prior to ground disturbance, the project owner shall transmit to the CPM a statement, signed by the project manager, stating that the above notification has been performed, and describing the method of that notification, verifying that the telephone number has been established and posted at the site, and giving that telephone number.

NOISE-2 Throughout the construction and operation of the project, the project owner shall document, investigate, evaluate, and attempt to resolve all project related noise complaints.

The project owner or authorized agent shall:

- Use the Noise Complaint Resolution Form (see Exhibit 1), or functionally equivalent procedure acceptable to the CPM, to document and respond to each noise complaint;
- Attempt to contact the person(s) making the noise complaint within 24 hours;
- Conduct an investigation to determine the source of noise related to the complaint;

- If the noise is project related, take all feasible measures to reduce the noise at its source: and
- Submit a report documenting the complaint and the actions taken. The report shall include a complaint summary, including final results of noise reduction efforts; and, if obtainable, a signed statement by the complainant stating that the noise problem is resolved to the complainant's satisfaction.

<u>Verification:</u> Within 5 days of receiving a noise complaint, the project owner shall file a copy of the Noise Complaint Resolution Form with the Riverside County Planning Department and the CPM, documenting the resolution of the complaint. If mitigation is required to resolve a complaint, and the complaint is not resolved within a 3-day period, the project owner shall submit an updated Noise Complaint Resolution Form when the mitigation is implemented.

NOISE-3 The project owner shall submit a noise control program plan to the CPM for review and approval. The noise control program shall be used to reduce employee exposure to high noise levels during construction and also to comply with applicable OSHA and Cal-OSHA standards.

<u>Verification:</u> At least 30 days prior to the start of ground disturbance, the project owner shall submit to the CPM the noise control program. The project owner shall make the program available to Cal-OSHA upon request.

NOISE-4 If a traditional, high-pressure steam blow process is employed, the project owner shall equip steam blow piping with a temporary silencer that quiets the noise of steam blows to no greater than 86 dBA measured at a distance of 100 feet. The noise level at the nearest residence produced by this operation must be less than a constant value of 48 dBA. The project owner shall conduct high pressure steam blows only during the hours of 8 a.m. to 5 p.m., unless the CPM agrees to longer hours based on a demonstration by the project owner that offsite noise impacts will not cause annoyance.

If a low-pressure continuous steam blow or air blow process is employed, the project owner shall submit a description of this process, with expected noise levels and projected period of execution, to the CPM, who shall review the proposal with the objective of ensuring that the resulting noise levels from this process do not exceed 42 dBA hourly Leq at the most-affected residence. If the low-pressure process is approved by the CPM, the project owner shall implement it in accordance with the requirements of the CPM.

<u>Verification:</u> At least 15 days prior to the first high-pressure steam blow, the project owner shall submit to the CPM drawings or other information describing the temporary steam blow silencer and the noise levels expected, and a description of the steam blow schedule.

At least 15 days prior to any low-pressure continuous steam blow, the project owner shall submit to the CPM drawings or other information describing the process, including the noise levels expected and the projected time schedule for execution of the process.

NOISE-5 Prior to the first steam or air blow(s), the project owner shall notify all residents within one-half mile of the site, and the principal of the Romoland School, of the planned activity, and shall make the notification available to other area residents in an appropriate manner.

<u>Verification:</u> The notification may be in the form of letters to the area residences, telephone calls, fliers or other effective means. The notification shall include a description of the purpose and nature of the steam or air blow(s), the proposed schedule, the expected sound levels, and the explanation that it is a one-time operation and not a part of normal plant operations.

NOISE-6 The project design and implementation shall include appropriate noise mitigation measures adequate to ensure that the noise level produced by operation of the project (including the gas compressor station) will not exceed an L₅₀ of 45 dBA measured at any residence.

No new pure tone components may be introduced. No single piece of equipment shall be allowed to stand out as a source of noise that draws legitimate complaints. Steam relief valves shall be adequately muffled to preclude noise that draws legitimate complaints.

The measurement of power plant noise for the purposes of demonstrating compliance with this condition of certification may alternatively be made at a location, acceptable to the CPM, closer to the plant (e.g., 400 feet from the plant boundary) and this measured level then mathematically extrapolated to determine the plant noise contribution at the nearest residence. However, notwithstanding the use of this alternative method for determining the noise level, the character of the plant noise shall be evaluated at the nearest residence to determine the presence of pure tones or other dominant sources of plant noise. When the project first achieves a sustained output of 80 percent or greater of rated capacity, the project owner shall conduct a 25-hour community noise survey at Locations 1, 2, and 3. The noise survey shall also include short-term measurement of one-third octave band sound pressure levels at each of the above locations to ensure that no new pure-tone noise components have been introduced.

If the results from the two noise surveys (AFC vs. post-construction) indicate that the noise level due to the plant operations exceeds 45 dBA for any given hour during the 25-hour period, mitigation measures shall be implemented to reduce noise to a level of compliance with these limits.

If the results from the two noise surveys (AFC vs. post-construction) indicate that pure tones are present, mitigation measures shall be implemented to eliminate the pure tones.

<u>Verification:</u> The post-construction survey shall take place within 30 days of the project first achieving a sustained output of 80 percent or greater of rated capacity. Within 15 days after completing the post-construction survey, the project owner shall submit a summary report of the survey to the Riverside County Planning Department

and to the CPM. Included in the post-construction survey report will be a description of any additional mitigation measures necessary to achieve compliance with the above listed noise limits, and a schedule, subject to CPM approval, for implementing these measures. When these measures are in place, the project owner shall repeat the operational noise survey.

Within 15 days of completion of installation of these measures, the project owner shall submit to the CPM a summary report of a new noise survey, performed as described above and showing compliance with this condition.

NOISE-7 Following the project first achieving a sustained output of 80 percent or greater of rated capacity, the project owner shall conduct an occupational noise survey to identify the noise hazardous areas in the facility. The survey shall be conducted by a qualified person in accordance with the provisions of Title 8, California Code of Regulations, sections 5095-5099 (Article 105) and Title 29, Code of Federal Regulations, section 1910.95. The survey results shall be used to determine the magnitude of employee noise exposure. The project owner shall prepare a report of the survey results and, if necessary, identify proposed mitigation measures that will be employed to comply with the applicable California and federal regulations.

<u>Verification:</u> Within 30 days after completing the survey, the project owner shall submit the noise survey report to the CPM. The project owner shall make the report available to OSHA and Cal-OSHA upon request.

NOISE-8 Heavy equipment operation and noisy construction work shall be restricted to the times of day delineated below:

Weekdays 7 a.m. to 7 p.m.

Weekends and Holidays 8 a.m. to 5 p.m.

Haul trucks and other engine-powered equipment shall be equipped with adequate mufflers. Haul trucks shall be operated in accordance with posted speed limits. Truck engine exhaust brake use shall be limited to emergencies.

Horizontal drill rigs may be operated on a continuous basis, provided that the rigs are fitted with adequate mufflers and engine enclosures, and that the rigs are shielded from view of residences by berms, canal banks or other suitable barriers.

<u>Verification:</u> Prior to ground disturbance, the project owner shall transmit to the CPM in the first Monthly Construction Report a statement acknowledging that the above restrictions will be observed throughout the construction of the project

PUBLIC HEALTH

CONDITIONS OF CERTIFICATION

Staff agrees to the following changes to the Conditions of Certification:

Public Health-1 The project owner shall develop and implement a cooling tower Biocide Use, Biofilm Prevention, and Legionella Monitoring Control Program to ensure that the potential for cooling tower bacterial growth is kept to an absolute minimum. controlled. This Program shall include weekly monitoring of biocide and chemical biofilm prevention agents, periodic maintenance of the cooling water system on a quarterly basis to remove bio film buildup, and quarterly testing to determine the concentrations of Legionella bacteria in the cooling water, The program shall be consistent with CEC guidelines or the Cooling Technology Institute guidelines.

<u>Verification:</u> At least <u>60-30</u> days prior to the commencement of cooling tower operations, the Biocide Use, Biofilm Prevention, and Legionella <u>Control Monitoring</u> Program shall be provided to the CPM for review and approval.

SOCIOECONOMICS

CONDITIONS OF CERTIFICATION

SOCIO-1 The project owner shall pay the one-time statutory school development fee as required at the time of filing for the in-lieu building permit with the Riverside County Building Department.

<u>Verification:</u> The project owner shall provide proof of payment of the statutory development fee in the Monthly Compliance Report following the payment.

SOIL AND WATER RESOURCES

CONDITIONS OF CERTIFICATION

Staff agrees to the following changes to the Conditions of Certification:

SOIL & WATER 1: Prior to beginning any site mobilization activities for any project element, the project owner shall obtain Compliance Project Manager (CPM) approval for a site-specific Erosion and Sedimentation Control Plan (ESCP) that addresses all project elements. The ESCP shall be consistent with the standards normally required in Riverside County's Grading and Excavation Permits for all project elements, including a Geotechnical Soils Report and specification of any areas for import or export of soils. The plan shall address revegetation and be consistent with the grading and drainage plan as required by Condition of Certification **CIVIL 1**.

<u>Verification:</u> No later than 60 days prior to the start of any site mobilization for any project element, the project owner shall submit the ESCP to the CPM for review and approval. No later than 60 days prior to start of any site mobilization, the project owner shall submit a copy of the ESCP to the County of Riverside Building and Safety Department for review and request any comments be provided to the CPM within 30 days.

SOIL & WATER 2: Prior to beginning site mobilization, the project owner shall submit a Notice of Intent for construction under the General National Pollutant Discharge Elimination System (NPDES) Permit for Discharges of Storm Water Associated with Construction Activity to the State Water Resources Control Board (SWRCB). The project owner shall develop and implement a Storm Water Pollution Prevention Plan (SWPPP) for the construction of the entire project. The SWPPP shall be submitted to the United States Army Corps of Engineers (USACOE) for comments and consideration of jurisdiction under Section 404 of the Clean Water Act, to Riverside County and the RWQCB for review and comment, and to the CPM for review and approval. The SWPPP will include final construction drainage design consistent with the criteria specified by County of Riverside and specify Best Management Practices (BMPs) for all on- and off-site IEEC project facilities. BMPs shall also control soil erosion from storm water drainage below the detention pond and from storm water discharge of the eastern boundary interception ditch and protect the bed and bank drainage feature running adjacent to the southern IEEC boundary. Conditions of Certification BIO-7 and BIO-8 address requirements for 401 Water Quality Certification from the Regional Water Quality Control Board and a Section 404 Permit from the Army Corps of Engineers.

<u>Verification:</u> No later than <u>60 180</u>-days prior to the start of site mobilization for any project element, the SWPPP for <u>Construction</u> Activity and a copy of the Notice of Intent for construction under the General NPDES Permit for Discharges of Storm Water Associated with Construction Activity filed with the SWRCB, shall be submitted to the <u>USACOE</u>, County of Riverside Building and Safety Department, and the <u>RWQCB</u> for

comments and to the CPM for approval. <u>Approval of the SWPPP must be received from the CPM prior to site mobilization.</u>

SOIL & WATER 3: Prior to initiating project commercial operation, the project owner shall submit a Notice of Intent for operation under the General NPDES Permit for Discharges of Storm Water Associated with Industrial Activity to the State Water Resources Control Board (SWRCB). The project owner shall develop and implement a Storm Water Pollution Prevention Plan (SWPPP) for the operation of the project. The SWPPP shall be submitted to the USACOE for comments and consideration of jurisdiction under Section 404 of the Clean Water Act, to Riverside County and the RWQCB for review and comment, and to the CPM for review and approval. The SWPPP will include final operating drainage design consistent with the criteria specified by the County of Riverside and specify BMPs and monitoring requirements for the IEEC project facilities. BMPs shall also control soil erosion from drainage of storm water below the detention pond and from storm water discharge in the eastern boundary interception ditch to protect the bed and bank drainage feature running adjacent to the IEEC southern boundary. Conditions of Certification BIO-7 and BIO-8 address requirements for 401 Water Quality Certification from the Regional Water Quality Control Board and a Section 404 Permit from the Army Corps of Engineers.

<u>Verification:</u> No later than 60 days prior to the start of <u>project commercial</u> operation for any project element, the SWPPP for <u>Industrial</u> Activity and a copy of the Notice of Intent for operating under the General NPDES Permit for Discharges of Storm Water Associated with Industrial Activity filed with the SWRCB, shall be submitted to the <u>USACOE</u>, County of Riverside Building and Safety Department, and the RWQCB for comments, and to the CPM for approval. <u>Approval of the SWPPP must be received from the CPM prior to commercial operation</u>.

SOIL & WATER 4: The project owner shall use tertiary-treated water supplied from Eastern Municipal Water District's (EMWD's) Recycled Water System as its primary source of water for cooling, and process and landscape irrigationwater supply. Based on EMWD's projected availability of recycled water supply to IEEC, it is recognized that EMWD may need to augment its recycled water system with raw fresh-water during the early years of IEEC project operation. The project owner will obtain copies of project water-use records derived from EMWD's recycled water revenue meters. In addition, the project owner shall obtain copies of meter records or other appropriate records documenting methodology used by EMWD for billing purposes to quantify for-EMWD's fresh water augmentation to its recycled water system at the Perris Water Treatment Plant for indirect supply to IEEC. The project owner shall prepare an annual summary, which will include the monthly range and monthly average of daily water usage in gallons per day, and total water used on a monthly and annual basis in acre-feet. The annual summary shall distinguish sources and uses of water according to recycled water supplied for IEEC cooling, and process and landscape irrigation purposes, fresh water for IEEC potable supply, and raw fresh-water augmenting EMWD's recycled

water system at the Perris Water Treatment Plant. For years subsequent to the initial year of IEEC operation, the annual summary will also include the yearly range and yearly average water use.

<u>Verification:</u> The project owner shall submit a water use summary report to the CPM in the Annual Compliance Report (ACR), for the life of the project. The annual water use summary report shall be based on and shall distinguish recorded monthly use of raw water, potable and recycled water for all project uses, including landscape and agriculture irrigation. The report shall include calculated monthly range, monthly average, and annual use by the project in both gallons per minute and acre feet. For subsequent years this information shall also include the yearly range and yearly average water used by the project. Any <u>significant anticipated</u> changes not consistent with these conditions of certification in the water supply for the project 's use of recycled and/or raw water for cooling, process or landscape uses shall be noticed in writing to the CPM at least 60 days prior to the proposed effective date of the change, and be subject to CPM approval.

SOIL & WATER 5: The project owner has agreed to use recycled water to the fullest extent possible. However, in the initial years of operation, EMWD has projected that they would have to supplement recycled water with raw imported water in amounts that would not impact the adequacy of imported water to others. The project owner must develop a mechanism with EMWD to determine the extent to which imported water is indirectly used to supplement recycled water to supply IEEC and report annually to the CPM the actual amounts of raw water indirectly supplied to IEEC. The project owner shall work cooperatively with EMWD to ensure that such indirect use does not exceed the amounts shown in the following table, except under the circumstances defined below. Iimit the use of fresh water to augment the water available to it from the recycled water system as described in the table below:

EXCERPT FROM SOIL AND WATER TABLE 8 MAXIMUM LIMITS OF RAW WATER AUGMENTATION TO EMWD'S RECYCLED WATER SYSTEM ATTRIBUTABLE TO IEEC (ACRE-FEET/YEAR)

Year	Maximum Limits of Raw Water Augmentation Attributable to IEEC		
2005	1,000		
2006	800		
<u>2007</u>	<u>600</u>		
<u>2008</u>	<u>400</u>		
<u>2009</u>	<u>200</u>		
<u>2010</u>	100		
2011 and after	100		

Year	Recycled	Anticipated	Anticipated	Maximum Limits
	Water	Fresh Water	Fresh Water	of Fresh Water
	Available	Augmentation	Augmentation	Augmentation

	From EMWD	Needed To Meet Average 4,150 afy Demands	Needed To Meet Peak 4,958 afy Demands	Attributable to IEEC
2005	4,085	65	873	1,000
2006	4,275	0	683	800
2007	4,465	0	493	600
2008	4 ,629	0	329	400
2009	4,770	θ	188	200
2010	4,889	0	69	100
2011 and after	4, 958	θ	0	100

The project owner must manage its water use for cooling and process needs in order to not exceed these maximum limits of fresh water augmentation to EMWD's recycled water system attributable to the IEEC. If a recycled water supply deficiency occurs due to an act of God, a natural disaster, an unforeseen emergency or other unforeseen circumstances outside the control of the project owner, additional raw fresh-water in excess of these amounts 100 afy-can be used. If one of the aforementioned unavoidable circumstances should occur, the CPM, project owner and EMWD shall confer and determine how to restore the recycled water supply as soon as practicable.

<u>Verification:</u> The project owner shall submit a water use summary to the CPM in the ACR for the life of the project. Any <u>significant</u> change in the water supply for the project during construction or operation of the plant shall be noticed in writing to the CPM at least 60 days prior to the proposed effective date of the change, and <u>shall be</u> subject to <u>conferring with EMWD and the CPM-approval</u>. The project owner shall track its <u>raw fresh-water</u> use on a monthly basis using EMWD's meter readings <u>or other appropriate methodology used for EMWD's billing purposes</u> in order to notify the CPM immediately upon exceeding, or upon forecasting to exceed, the maximum <u>raw fresh-water</u> use as specified above.

SOIL & WATER 6: Prior to <u>initiating</u>-project <u>commercial</u> operation, the project owner shall submit evidence of having secured a Service Agreement with EMWD. The Service Agreement shall address recycled water and raw water supplemented for process, <u>and</u>-cooling <u>and landscape irrigation</u>, potable water for domestic and fire protection, process <u>wastewater to be discharged into the non-reclaimable waste line</u>, and sanitary wastewater services. The Service Agreement shall include the Industrial Waste Discharge Permit and Non-Reclaimable Wastewater Discharge Permit as issued by EMWD.

<u>Verification:</u> At least <u>30</u> <u>60</u>-days prior to <u>the start of project commercial operation</u>, the project owner shall submit to the CPM a copy of the executed Service Agreement for IEEC between the project owner and EMWD for obtaining recycled water, supplemental raw water, potable water, process wastewater discharge and sanitary wastewater service.

SOIL & WATER 7: Following initiation of commercial operation, the project owner shall provide the CPM and the County of Riverside Flood Control Agency evidence of its submittal of as-built plans and related information as specified in FEMA's Conditional Letter of Map Revision (CLOMR) dated February 20, 2001 in order for FEMA to initiate a revision to the Flood Insurance Rate Map (FIRM) and Flood Insurance Study (FIS) Report. The project owner shall also submit to the CPM a copy of FEMA's Final Letter of Map Revision (LOMR).

<u>Verification:</u> Within 180 days following initiation of commercial operation of the IEEC, the project owner shall submit to the CPM and the County of Riverside evidence of its submittal of as-built plans and related information. The project owner shall submit to the CPM evidence of receipt of the LOMR from FEMA, and a copy of the revised FIRM.

SOIL & WATER 8: Prior to site mobilization, the applicant shall pay a Flood Mitigation Fee in the amount assessed in accordance with Riverside County's Homeland/Romoland Area Drainage Plan (ADP) to assist in providing revenue to establish adequate community drainage facilities. The amount of the fee for industrial development shall be calculated on the basis of the prevailing Area Drainage Plan fee rate multiplied by the area of the new development.

<u>Verification:</u> Prior to site mobilization, the project owner shall submit to the CPM, documentation that payment has been made to the County of Riverside, for the Flood Mitigation Fee.

TRAFFIC AND TRANSPORTATION

CONDITIONS OF CERTIFICATION

Staff agrees to the following changes to the Conditions of Certification:

TRANS-1 The project owner shall comply with California Department of Transportation (Caltrans) and Riverside County limitations on vehicle sizes and weights. Overload Limit Permits will be obtained from Caltrans, as necessary. In addition, the project owner or its contractor shall obtain other necessary transportation permits from Caltrans and all relevant jurisdictions for both rail and roadway use.

Verification: In the Monthly Compliance Reports, the project owner shall submit copies of any oversize and overweight transportation permits received during that reporting period. In addition, the project owner shall retain copies of these permits and supporting documentation in its compliance file for at least six months after the start of commercial operation.

TRANS-2 The project owner or its contractor shall comply with California Department of Transportation (Caltrans), City of Perris, and Riverside County limitations for encroachment into public rights-of-way and shall obtain necessary encroachment permits from Caltrans, Riverside County, City of Perris, and all other relevant jurisdictions.

<u>Verification:</u> In the Monthly Compliance Reports, the project owner shall submit copies of any encroachment permits received during that reporting period. In addition, the project owner shall retain copies of these permits and supporting documentation in its compliance file for at least six months after the start of commercial operation.

TRANS-3 The project owner shall ensure that all federal and state regulations for the transport of hazardous materials are observed.

<u>Verification:</u> The project owner shall include in its Monthly Compliance Reports copies of all permits and licenses acquired by the project owner and/or subcontractors concerning the transport of hazardous materials.

TRANS-4 Following completion of project construction of the IEEC and all linear facilities, the project owner shall restore Ethanac, Matthews, and Palomar Roads to their pre-construction condition unless the damage is shown not to be a result of IEEC construction activities.

<u>Protocol:</u> Prior to start of site preparation or earth moving activities, the project owner shall photograph, videotape, or digitally record images of Ethanac Road from I-215 to Matthews Road, Matthews Road from Ethanac Road to Palomar Road, and Palomar Road from Matthews Road to SR 74. The project owner shall provide the CEC Compliance Project Manager (CPM), Riverside County, and Caltrans (as necessary) a copy of these images. At least 60 days prior to start of site preparation or earth moving activities, the project owner shall also notify Caltrans about the schedule for

project construction. The purpose of this notification is to postpone any planned roadway resurfacing and/or improvement projects until after the project construction has taken place and to coordinate construction related activities associated with other projects.

<u>Verification</u>: Within 30 days after completion of project construction, the project owner shall meet with the CPM, Riverside County, and Caltrans (as needed) to determine and receive approval for the actions necessary and schedule to complete the repair of identified sections of public roadways to original or as near original condition as possible. The project owner shall provide to the CPM a letter from Riverside County stating their satisfaction with the road improvements.

TRANS-5 During construction of the power plant and all related facilities, the project owner shall enforce a policy that all project-related parking occurs in designated parking areas.

<u>Verification:</u> At least <u>45 60</u> days prior to start of site preparation or earth moving activities, the project owner shall submit a parking and staging plan for all phases of project construction to Riverside County for review and comment, and to the CPM for review and approval.

- TRANS-6 The project owner shall develop a construction traffic control plan that outlines what measures need to be taken on a month-to-month basis with input from Riverside County, Caltrans and the CPM. Specifically, the construction Contractor will be required to prepare a traffic control plan and implementation program that addresses timing of heavy equipment and building material deliveries; employee trip reduction; and signing, lighting, and traffic control device placement. The following specific best management practices will be incorporated into the construction traffic control plan:
 - Truckloads will not exceed legal limits.
 - Loads of material (i.e. excavated soil) will either be enclosed by vehicle covers, or wetted and loaded, or centered in the truck to provide at least one foot of free board and prevent wind blowing materials out of the truck.
 - Trucks and trailers will be swept clean or hosed after unloading and before entering a public roadway.
 - Mufflers, brakes, and all loose items on trucks will be maintained to minimize noise and ensure safe operation.
 - Truck operations will be kept to quietest operating speeds. Drivers will be advised to avoid downshifting while driving through or near residential communities.
 - Traffic control will be coordinated with BNSF to ensure motorists are aware of any railroad trips during construction.
 - Traffic control will be coordinated with any construction in the vicinity of the project on the proposed Hemet to Corona/Lake Elsinore transportation corridor.

<u>Verification:</u> At least 30 days prior to start of site preparation or earth moving activities, the project owner shall provide the plan to Riverside County and Caltrans for review and comment, and to the CPM for review and approval.

TRANS-7 During construction and operation of the IEEC, the project owner and contractors shall enforce a policy that all project-related traffic travel on Antelope Road from the project site to Ethanac Road in order to access SR 74, I-215, and other areas. Project traffic will not travel on Antelope Road north of Ethanac Road so as to avoid the school located on Antelope Road near Monroe Avenue.

<u>Verification:</u> At least <u>45_60</u> days prior to start of site preparation or earth moving activities, the project owner shall provide a traffic routing plan for all phases of project construction and operation to Riverside County and Caltrans for review and comment, and to the CPM for review and approval.

TRANS-8 The project owner and contractor shall gravel the currently unpaved section of Antelope Road between Ethanac Road and the project site prior to commencing construction. Surfacing Pavement that provides adequate truck turning radii shall be in place to help facilitate safe truck-turning movements. Upon completion of construction, the project owner and contractor shall pave and extend Antelope Road and build a road for circulation within the IEEC site. Antelope Road's 24-foot wide, 1,000 feet long extension from its current terminus south of Ethanac Road will be used to provide normal access to the IEEC site. Within the IEEC site, a 20-foot wide loop road will provide internal circulation.

<u>Verification:</u> At least <u>45</u> 60 days prior to start of site preparation or earth moving activities, the project owner shall submit plans for modifications to Antelope and San Jacinto Roads to Riverside County for review and comment, and to the CPM for review and approval. The project owner shall provide to the CPM a letter from Riverside County stating their satisfaction with the plans. In addition to the letter, the project owner shall provide a copy of the Signal Mitigation Program fee payment to the CPM. Within 30 days after completion of project construction, the project owner shall meet with the CPM, Riverside County and Caltrans (as needed) to determine and receive approval for the actions necessary to complete the Antelope Road extension and internal circulation. The project owner shall submit to the CPM a letter from Riverside County stating their satisfaction with the completed road improvements.

TRANSMISSION LINE SAFETY AND NUISANCE

CONDITIONS OF CERTIFICATION

Staff agrees to the following changes to the Conditions of Certification:

TLSN-1 The project owner shall <u>ensure that construct</u> the proposed interconnection transmission lines <u>are constructed</u> according to the requirements of CPUC's GO-95, applicable requirements of Title 8, Section 2700 et seq. of the California Code of Regulations and SCE's EMF reduction guidelines arising from CPUC Decision 93-11-013.

<u>Verification:</u> Thirty days before starting construction of the IEEC's transmission line or related structures and facilities, the <u>transmission line_project</u> owner shall submit to the Energy Commission's Compliance Project Manager (CPM) a letter signed by a <u>transmission line owner's</u> responsible manger affirming that the overhead section will be constructed according to the requirements GO-95, applicable requirements of Title 8, Section 2700 et seq. of the California Code of Regulations, and SCE's EMF-reduction guidelines arising from CPUC Decision 93-11-013.

TLSN-2 The project owner shall ensure that all metallic objects along the route of the overhead section are grounded according to industry standards. Those portions of the overhead section that are transferred to a regulated public utility that is subject to a substantively similar requirement shall no longer be subject to this condition.

<u>Verification:</u> At least 30 days before the lines are energized, the project owner shall transmit to the CPM a letter confirming compliance with this condition.

TLSN-3 The project owner shall take reasonable steps to resolve any complaints of interference with radio or television signals from operation of the proposed line.

<u>Verification:</u> Any reports of line-related complaints shall be summarized along with related mitigation measures and provided in an annual report to the CPM. Such a vearly summary shall be provided for only the first five years of operation.

TLSN-4 The project owner shall utilize a qualified individual or individuals to measure the strengths of the electric and magnetic fields encountered within the proposed line right-of-way after the start of plant operation. it is energized. Measurements shall be made at representative points (on-site and along the line route) as necessary to identify the maximum field exposures possible during IEEC operations, to verify the design assumptions relative to field strengths. Any staff recommendation about corrective action would depend on the results of these measurements.

<u>Verification:</u> The project owner shall file copies of the post-energization measurements with the CPM within 60 days after <u>the plant commercial operation date.</u> <u>completion.</u>

VISUAL RESOURCES

CONDITIONS OF CERTIFICATION

Staff agrees to the following changes to the Conditions of Certification:

Construction Screening and Surface Restoration

VIS-1 The project owner shall ensure that visual impacts of project construction are adequately mitigated. To accomplish this, the project owner shall <u>assure that:</u> require the following as a condition of contract with its contractors to construct the proposed project:

If visible from nearby residences and roadways including I-215, SR-74, Ethanac Road, Dawson Road, Almaden Lane, McLaughlin Road, Menifee Road, and Murrieta Boulevard, the project site as well as staging and material and equipment storage areas shall be visually screened with temporary screening fencing. Fencing will be of an appropriate design and color for each specific location, as determined by the CPM. All evidence of construction activities, including ground disturbance due to staging and storage areas, shall be removed and all disturbed areas shall be remediated to an original or improved condition upon completion of construction including the replacement of any vegetation or paving removed during construction.

The project owner shall submit to the CPM for review and approval a specific screening and restoration plan whose proper implementation will satisfy these requirements.

The project owner shall not implement the screening and restoration plan until receiving written approval from the CPM.

<u>Verification:</u> At least <u>6090</u> days prior to the start of site mobilization, the project owner shall submit the screening and restoration plan to the CPM for review and approval and to Riverside County for review and comment.

If the CPM notifies the project owner that any revisions of the screening and restoration plan are needed before the CPM will approve the plan, within 30 days of receiving that notification, the project owner shall submit to the CPM a revised plan.

The project owner shall notify the CPM within seven days after installing screening at staging and material and equipment storage areas that it is ready for inspection.

The project owner shall notify the CPM within seven days after completing the surface restoration that it is ready for inspection.

Surface Treatment of Project Structures and Buildings

- VIS-2 Prior to first turbine roll commercial operation, the project owner shall treat the surfaces of all project structures and buildings conventionally receiving color treatment and visible to the public such that their colors minimize visual intrusion and contrast by blending with the landscape; their surfaces do not create glare; and they are consistent with local laws, ordinances, regulations, and standards. The project owner shall submit for CPM review and approval, a specific treatment plan whose proper implementation will satisfy these requirements. The treatment plan shall include:
 - a) Specification, and 11" x 17" color simulations at life size scale <u>from KOPs</u> <u>2, 4, and 5</u>, of the treatment proposed for use on project structures, including structures treated during manufacture;
 - A list of each major project structure, building, tank, transmission line tower and/or pole, and fencing specifying the color(s) and finish proposed for each (colors must be identified by name and by vendor brand or a universal designation);
 - c) Two sets of brochures and/or color chips for each proposed color;
 - d) Samples, approximately 8 inches by 10 inches, of each proposed treatment and color on each material to which they would be applied that would be visible to the public;
 - e) A detailed schedule for completion of the treatment; and
 - f) A procedure to ensure proper treatment maintenance for the life of the project.

The project owner shall not specify to the vendors the treatment of any buildings or structures treated during manufacture, or perform the final treatment on any buildings or structures treated on site, until the project owner receives notification of approval of the treatment plan by the CPM.

The project owner may, at its own risk, order equipment with factory surface treatment prior to approval of the treatment plan. If the CPM does not approve the treatment plan, the project owner shall have the equipment modified at its expense, as necessary, to obtain the required approval. Under no circumstances shall the project owner install the equipment at the project site prior to CPM approval of the treatment plan.

Verification: The project owner shall submit its proposed treatment plan at least 60 days prior to ordering the first structures that are color treated during manufacture.

If a revision is required, the project owner shall provide the CPM with a revised plan within 30 days of receiving notification that revisions are needed.

Prior to first turbine roll, the start of commercial operation, the project owner shall notify the CPM that all buildings and structures are ready for inspection.

The project owner shall provide a status report regarding treatment maintenance in the Annual Compliance Report.

Landscape Screening

VIS-3 The project owner shall provide landscaping that is effective in screening the proposed project from views from I-215, State Route (SR)-74, Ethanac Road, Dawson Road, Almaden Lane, Spring Winds Drive, North Winds Drive, McLaughlin Road, Menifee, and nearby residences. Trees and other vegetation consisting of informal groupings of fast-growing evergreen trees species must be strategically placed and of sufficient density and height to effectively screen the majority of structural forms within five years after first turbine roll as soon as is reasonably practicable. The landscaping shall conform to the applicant's Revised Landscaping Plan submitted by the project owner on December 20, 2002 (Calpine 2002g, see also VISUAL RESOURCES Figure 17) except for the changes indicated by italics in the following list..(1) street trees shall be planted immediately west of the project site along Antelope Road, (2) two offset rows of taller evergreen screening trees shall be planted on the berm to be constructed on the west side of the project site bordering Antelope Road, one row on top of the berm and one row on the west slope of the berm; (3) evergreen shrubs shall also be planted on the western berm to provide screening beneath the tree branches; (4) Landscape plantings along the western half of the southern boundary shall be initiated within one year of the start of construction; (5) Landscape plantings along the southern side of SR 74 shall be installed at the start of construction in order to further reduce the time to effective project screening when viewed from KOP 5 and SR 74: If the Riverside County Economic Development Agency agrees to permit the project owner to incorporate planting along the southern side of SR 74 into its plans for beautification of the Highway 74 corridor, the plantings in this area shall be installed at the start of construction or as soon after the start of construction as the EDA permits; and (6) informal groupings of fast-growing broadleaf evergreen trees shall be placed along all sides of the power plant and compressor station sites. VISUAL RESOURCES Figures 11C, 12C, 13C, 14C, 15C, and 16C illustrate a degree of project screening that is considered effective.

The project owner shall submit a landscaping plan to the CPM for review and approval. The plan shall include:

- a) 11"x17" color simulations of the proposed landscaping at five years as viewed from KOPs 1, 2, 4, and 5 and 6;
- b) a plan view to scale depicting the project and the location of the landscape screening;
- c) a detailed list of plants to be used, their size and age at planting, the expected time to maturity, and the expected height at five years and at maturity; and a table showing when the screening objectives are calculated to be achieved for each of the major project structures, and the

- height and elevation of the features of the existing setting and the project that are factors in those calculations-;
- d) A description of any irrigation needed to ensure the proper growth and health of the plantings.

The project owner shall not implement the plan until the project owner receives approval of the submittal from the CPM. However, tThe planting must be completed by start of project commercial operation.

<u>Verification:</u> Prior to site mobilization and at least <u>9045</u> days prior to installing the landscaping, the project owner shall submit the landscaping plan to the CPM for review and approval and to Riverside County for review and comment.

If the CPM notifies the project owner that revisions of the submittal are needed before the CPM will approve the submittal, within 30 days of receiving that notification, the project owner shall prepare and submit to the CPM a revised submittal.

The project owner shall notify the CPM within seven days after completing installation of the landscaping, that the landscaping is ready for inspection.

Construction Lighting

- VIS-4 The project owner shall ensure that lighting for construction of the power plant is used in a manner that minimizes potential night lighting impacts, as follows:
 - a) All lighting shall be of minimum necessary brightness consistent with worker safety;
 - All fixed position lighting shall be shielded, hooded, and directed downward to minimize backscatter to the night sky and direct light trespass (direct lighting extending outside the boundaries of the construction area);
 - c) Wherever feasible and safe and not required for security, lighting shall be kept off when not in use and motion detectors shall be employed; and
 - d) A lighting complaint resolution form (following the general format of that in the general compliance section of the compliance planVISUAL RESOURCES Appendix VR-2) shall be maintained by plant construction management, to record all lighting complaints received and to document the resolution of that complaint.

<u>Verification:</u> Within seven days after the first use of construction lighting, the project owner shall notify the CPM that the lighting is ready for inspection.

If the CPM notifies the project owner that modifications to the lighting are needed to minimize impacts, within 15 days of receiving that notification the project owner shall implement the necessary modifications and notify the CPM that the modifications have been completed.

The project owner shall report any lighting complaints and documentation of resolution in the Monthly Compliance Report, accompanied by any lighting complaint resolution forms for that month.

Permanent Lighting

- VIS-5 The project owner shall design and install all permanent lighting such that light bulbs and reflectors are not visible from public viewing areas; lighting does not cause reflected glare; project illumination that is visible off-site is minimized; and illumination of the project, the-vicinity, and the nighttime sky is minimized. To meet these requirements the project owner shall submit a lighting mitigation control plan that includes but is not necessarily limited to the following: incorporates the following elements:
 - a) Lighting shall be designed so exterior light fixtures are hooded, with lights directed downward or toward the area to be illuminated and so that backscatter to the nighttime sky is minimized. The design of the lighting shall be such that the luminescence or light source is shielded to prevent light trespass outside the project boundary.
 - b) All lighting shall be of minimum necessary brightness consistent with worker safety and security;
 - High illumination areas not occupied on a continuous basis (such as maintenance platforms) shall have switches or motion detectors to light the area only when occupied; and
 - d) A lighting complaint resolution form (following the general format of that in VISUAL RESOURCES Appendix VR-2) the general section of the compliance plan shall be used by plant operations to record all lighting complaints received and document the resolution of those complaints. All records of lighting complaints shall be kept in the on-site compliance file.

<u>Verification:</u> At least <u>9060</u> days prior to ordering any permanent exterior lighting, the project owner shall contact the CPM to arrange a meeting to discuss the documentation required in the lighting <u>mitigation</u> <u>control</u> plan.

At least <u>6045</u> days prior to ordering any permanent exterior lighting, the project owner shall submit to the CPM for review and approval a lighting <u>mitigation control</u> plan that describes the measures to be used and demonstrates that the requirements of the condition will be satisfied. The project owner shall not order any exterior lighting until it receives CPM approval of the lighting mitigation plan.

Prior to initial firing, Within 30 days after start of commercial operation, the project owner shall notify the CPM that the lighting has been completed and is ready for inspection. If the CPM notifies the project owner that modifications to the lighting are needed to satisfy the lighting requirements specified in this Condition, within 3060 days of receiving that notification the project owner shall implement the modifications and notify the CPM that the modifications have been completed.

The project owner shall report any complaints about permanent lighting and provide documentation of resolution in the Annual Compliance Report, accompanied by any lighting complaint resolution forms for that year.

Signage

VIS-6 The project owner shall comply with the signage requirements of Riverside County. In addition, the project owner shall install minimal signage, which shall be constructed of non-glare materials and unobtrusive colors, except where otherwise required for safety. The design of any signs required by safety regulations shall conform to the criteria established by those regulations. The project owner shall submit a signage plan for the project to the CPM for review and approval and to Riverside County for review and comment. The project owner shall not implement the plan until the project owner receives approval of the submittal from the CPM.

<u>Verification:</u> Prior to first turbine roll and aAt least 9060 days prior to installing signage, the project owner shall submit the signage plan to the CPM for review and approval and to Riverside County for review and comment.

If the CPM notifies the project owner that revisions of the plan are needed before the CPM will approve the submittal, within 30 days of receiving that notification, the project owner shall prepare and submit to the CPM a revised submittal.

The project owner shall notify the CPM within seven days after completing installation of signage that they are ready for inspection.

Project Design

VIS-7 The project owner shall implement project design measures that minimize visual impacts associated with project operation.

The project owner shall minimize project operational impacts by implementing the following:

- a) The project owner shall create a minimum 50-foot setback of project structures from surrounding roads (this requirement does not apply to transmission structures);
- b) The project owner shall place the one-story warehouse / administration / water treatment building, water tanks, and other smaller structures on the western edge of the project site to create a transition in scale between the corridor along Antelope Road and the plant's taller features; and
- c) The switchyard will make use of low profile equipment, as depicted in the AFC on Figures 3.4-2 and 5.10-9b to minimize its visibility beyond the tree rows that will be planted around it;

<u>Verification:</u> At least 60 days prior to the start of site mobilization, the project owner shall submit to the CPM for review and approval, the specifications for (a) project setbacks, <u>and</u> (b) structural placement, <u>At least 45 days prior to the start of construction on the switchyard, the project owner shall submit to the CPM for review and approval, the specifications for <u>and (c)</u> switchyard equipment with evidence that such equipment qualifies as low profile.</u>

If the CPM notifies the project owner that any revisions of the specifications are needed prior to CPM approval, within 30 days of receiving that notification, the project owner shall submit to the CPM revised specifications.

Architectural Screening

VIS-8 To reduce the visible structural complexity of the upper portions of the HRSGs, the project owner shall incorporate architectural screening into the design of the project to simplify its appearance and minimize its industrial character.

Prior to the start of construction, the project owner shall submit an architectural screening plan to the CPM for review and approval. The plan shall include:

- a)Detailed plans, elevation views, and specifications for the proposed architectural screening;
- b)11" x 17" color simulations at life-size scale of the proposed project with the architectural screening;
- c)A detailed schedule for installation of the architectural screening; and
- d)A procedure to ensure proper maintenance of the architectural screening for the life of the project.

The project owner shall not order the architectural screening prior to receiving approval of the plan from the CPM.

The project owner shall complete the installation of the architectural screening prior to the start of commercial operation.

<u>Verification:</u> Not less than 120 days prior to start of construction, the project owner shall submit the architectural screening plan to the CPM for review and approval. Not less than thirty 30 days prior to the start of commercial operation, the project owner shall notify the CPM that the architectural screening is ready for inspection.

The project owner shall provide a status report regarding screening maintenance in the Annual Compliance Report.

Cooling Tower Plume Frequency

VIS-98 The project owner shall ensure that the IEEC cooling tower is designed and operated so that the plume frequency will not increase <u>substantially</u> from the design as certified.

Prior to ordering the cooling towers, the project owner shall provide to the CPM for review and approval the final design specifications of the cooling tower related to plume formation. The project owner shall not order the cooling tower until notified by the CPM that the following design requirements have been satisfied:

Either:

- a) The cooling tower design confirms that the exhaust air flow rate per heat rejection rate:
 - will not be less than <u>29.8</u>31 kilograms per second per megawatt when operating without duct firing when ambient temperatures are between 32 degrees Fahrenheit and 100 degrees Fahrenheit; and
 - 2) will not be less than 18.42 24 kilograms per second per megawatt when operating with duct firing when ambient temperatures are between 32 degrees Fahrenheit and 100 degrees Fahrenheit; or
- b) If the cooling tower design exhaust air flow rates per heat rejection values are reduced from the levels shown in a) 1) or and 2) above, the cooling tower design confirms that the plume frequency will not exceed staff's criteria for triggering a visual impact analysis (i.e., greater than 10% of the seasonal daylight clear hours, where "clear" is defined as all hours with total sky cover equal to or less than 10 percent plus half of the hours with total sky cover 2-100 percent that have a sky opacity equal to or less than 50 percent. the project owner shall provide revised exhaust flow, exhaust temperature, and heat rejection data to allow staff to remodel the cooling tower plume frequency.

<u>Verification:</u> Alf the project owner intends to comply under requirement a) above, at least 6030 days prior to ordering the cooling towers, the project owner shall provide to the CPM for review and approval the final design specifications of the cooling tower related to plume formation.

If the project owner intends to comply under requirement b) above, at least 60 days prior to ordering the cooling tower, the project owner shall provide to the CPM for review and approval the final design specifications of the cooling tower related to plume formation, including revised exhaust flow, exhaust temperature, and heat rejection data to allow staff to remodel the cooling tower plume frequency.

The project owner shall provide a written certification in each Annual Compliance Report to demonstrate that the cooling towers have consistently been operated within the design parameters, except as necessary to prevent damage to the cooling tower. If determined by the CPM to be necessary to ensure operational compliance, based on legitimate complaints received or physical evidence of potential non-compliant operation, the project owner shall monitor the cooling tower operating parameters in a manner and for a period as specified by the CPM. For each period that the cooling tower operation monitoring is required, the project owner shall provide to the CPM the cooling tower operating data within 30 days of the end of the monitoring period. The project owner shall include with this operating data an analysis of compliance and shall provide proposed remedial actions if compliance cannot be demonstrated.

WASTE MANAGEMENT

CONDIDTIONS OF CERTIFICATION

WASTE-1 The project owner shall provide the resume of a Registered Professional Engineer or Geologist, who shall be available for consultation during soil excavation and grading activities, to the CPM for review and approval. The resume shall show experience in remedial investigation and feasibility studies.

The Registered Professional Engineer or Geologist shall be given full authority to oversee any earth moving activities that have the potential to disturb contaminated soil.

<u>Verification:</u> At least 30 days prior to the start of site mobilization the project owner shall submit the resume to the CPM.

WASTE-2 If potentially contaminated soil is unearthed during excavation at either the proposed site or linear facilities as evidenced by discoloration, odor, detection by handheld instruments, or other signs, the Registered Professional Engineer or Geologist shall inspect the site, determine the need for sampling to confirm the nature and extent of contamination, and file a written report to the project owner and CPM stating the recommended course of action.

Depending on the nature and extent of contamination, the Registered Professional Engineer or Geologist shall have the authority to temporarily suspend construction activity at that location for the protection of workers or the public. If, in the opinion of the Registered Professional Engineer or Geologist, significant remediation may be required, the project owner shall contact representatives of the Santa Ana Regional Water Quality Control Board, the Riverside County Department of Environmental Health, and the Cypress Regional Office of the California Department of Toxic Substances Control for guidance and possible oversight.

<u>Verification</u>: The project owner shall submit any reports filed by the Registered Professional Engineer or Geologist to the CPM within 5 days of their receipt. The project owner shall notify the CPM within 24 hours of any orders issued to halt construction.

WASTE-3 The project owner shall obtain a hazardous waste generator identification number from the Department of Toxic Substances Control prior to generating any hazardous waste.

The project owner shall keep its copy of the identification number on file at the project site and notify the CPM via the Monthly Compliance Report of its receipt.

WASTE-4 Upon becoming aware of any impending waste management-related enforcement action by any local, state, or federal authority, the project owner shall notify the CPM of any such action taken or proposed to be taken against

the project itself, or against any waste hauler or disposal facility or treatment operator with which the owner contracts.

<u>Verification</u>: The project owner shall notify the CPM in writing within 10 days of becoming aware of an impending enforcement action. The CPM shall notify the project owner of any changes that will be required in the manner in which project-related wastes are managed.

- WASTE-5 The project owner shall prepare a Construction Waste Management Plan and an Operation Waste Management Plan for all wastes generated during construction and operation of the facility, respectively and shall submit both plans to the CPM for review and approval, and to the Riverside County Department of Environmental Health and the Eastern Municipal Water District for review and comment. The plans shall contain, at a minimum, the following:
 - A description of all waste streams, including projections of frequency, amounts generated and hazard classifications; and
 - Methods of managing each waste, including treatment methods and companies contracted with for treatment services, waste testing methods to assure correct classification, methods of transportation, disposal requirements and sites, and recycling and waste minimization/reduction plans.

<u>Verification</u>: No less than 30 days prior to the start of site mobilization, the project owner shall submit the Construction Waste Management Plan to the CPM for approval, and to the Riverside County Department of Environmental Health and the Eastern Municipal Water District for review and comment.

The operation waste management plan shall be submitted to the CPM for approval, and to the Riverside County Department of Environmental Health and the Eastern Municipal Water District for review and comment no less than 30 days prior to the start of project operation. The project owner shall submit any required revisions within 20 days of notification by the CPM.

In the Annual Compliance Reports, the project owner shall document the actual waste management methods used during the year compared to the planned management methods.

WORKER SAFETY AND FIRE PROTECTION

CONDITIONS OF CERTIFICATION

Staff agrees to the following changes to the Conditions of Certification:

WORKER SAFETY-1 The project owner shall submit to the CPM a copy of the Project Construction Safety and Health Program, containing the following:

- 1. A Construction Injury and Illness Prevention Program
- 2. A Construction Fire Protection and Prevention Plan
- 3. A Personal Protective Equipment Program
 - The Construction Injury and Illness Prevention Program and the Personal Protective Equipment Program shall be submitted to the California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA) Consultation Service, if appropriate required, for review and comment concerning compliance of the program with all applicable Safety Orders.
 - The Construction Fire Protection and Prevention Plan shall be submitted to the CPM for review and approval and to the Riverside County Fire Department and/or the Rural Fire Protection District for review and comment.

<u>Verification:</u> At least 30 days prior to the start of construction, the project owner shall submit to the CPM a copy of the Project Construction Safety and Health Program, the Personal Protective Equipment Program and the Construction Fire Protection and Prevention Plan, including a copy of the cover letter transmitting the Programs to Cal/OSHA's Consultation Service, if <u>appropriate required</u>.

WORKER SAFETY-2 The project owner shall submit to the CPM a copy of the Project Operation Safety and Health Program containing the following:

- 1. Operation Injury and Illness Prevention Program
- 2. Emergency Action Plan
- 3. Operation Fire Protection Program
- 4. Personal Protective Equipment Program
 - The Operation Injury and Illness Prevention Program, Emergency Action Plan, and Personal Protective Equipment Program shall be submitted to the California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA) Consultation Service, as appropriate if required, for review and comment concerning compliance of the program with all applicable Safety Orders.

 The Operation Fire Protection Program and the Emergency Action Plan shall be submitted to the fire protection agency serving the project for review and comment.

<u>Verification:</u> At least 30 days prior to the start of operation, the project owner shall submit to the CPM a copy of the final version of the Project Operation Safety & Health Program. The document shall incorporate Cal/OSHA's Consultation Service comments, if any, regarding its review and acceptance of the specified elements of the proposed Operation Safety and Health Plan

The project owner shall notify the CPM that the Project Operation Safety and Health Program, including all records and files on accidents and incidents, is present onsite.

FACILITY DESIGN

In the Applicant's email filed July 17, 2003, the applicant suggests deleting many major structures and equipment listed in **Table 1** of Facility Design Condition of Certification **GEN-2** on the basis that, in the applicant's opinion, many are not major structures and equipment. Staff believes that many of these items are considered major and should undergo CBO review and inspection. On the other hand, staff believes that some items are redundant or exist as parts of other structures and equipment already listed in the table, and should thus be omitted from the table. Further, the Verification portion of this Condition provides a mechanism whereby the project owner and the CBO, with the CPM's approval, can add items to or delete items from this table. Staff therefore agrees to adopt the applicant's proposed **Table 1**, below.

Staff agrees with the applicant's proposed changes to Facility Design Conditions **GEN-3**, **STRUC-1** and **STRUC-4**, and presents the revised Conditions incorporating these changes, below. As previously agreed upon between staff and the applicant, the proposed changes to **MECH-1** are unnecessary; this condition has been left intact.

The current edition of the California Building Code (CBC) is the 2001 edition, which went into effect on May 01, 2003. Therefore, staff proposes to change all references to the 1998 CBC to reflect the 2001 CBC.

The following changes are hereby incorporated on page ** of the FSA:

CONDITIONS OF CERTIFICATION

GEN-1 The project owner shall design, construct and inspect the project in accordance with the 1998/2001 California Building Code (CBC) and all other applicable engineering LORS in effect at the time initial design plans are submitted to the CBO for review and approval. (The CBC in effect is that edition that has been adopted by the California Building Standards Commission and published at least 180 days previously.) All transmission facilities (lines, switchyards, switching stations and substations) are handled in conditions of certification in the Transmission System Engineering section of this document.

In the event that the initial engineering designs are submitted to the CBO when a successor to the <u>19982001</u> CBC is in effect, the <u>19982001</u> CBC provisions identified herein shall be replaced with the applicable successor provisions. Where, in any specific case, different sections of the code specify different materials, methods of construction or other requirements, the most restrictive shall govern. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall govern.

<u>Verification:</u> Within 30 days after receipt of the Certificate of Occupancy, the project owner shall submit to the CPM a statement of verification, signed by the responsible design engineer, attesting that all designs, construction, installation and inspection requirements of the applicable LORS and the Energy Commission's Decision have been met in the area of facility design. The project owner shall provide the CPM a copy

of the Certificate of Occupancy within 30 days of receipt from the CBO [19982001] CBC, Section 109 – Certificate of Occupancy].

GEN-2 Prior to submittal of the initial engineering designs for CBO review, the project owner shall furnish to the CPM and to the CBO a schedule of facility design submittals, a Master Drawing List and a Master Specifications List. The schedule shall contain a list of proposed submittal packages of designs, calculations and specifications for major structures and equipment. To facilitate audits by Energy Commission staff, the project owner shall provide specific packages to the CPM when requested.

<u>Verification:</u> At least 60-30 days (or project owner and CBO approved alternative timeframe) prior to the start of rough grading, the project owner shall submit to the CBO and to the CPM the schedule, the Master Drawing List and the Master Specifications List of documents to be submitted to the CBO for review and approval. These documents shall be the pertinent design documents for the major structures and equipment listed in Table 1 below. Major structures and equipment shall be added to or deleted from the Table only with CPM approval. The project owner shall provide schedule updates in the Monthly Compliance Report.

TABLE 1:MAJOR STRUCTURES AND EQUIPMENT LIST

Equipment/System	Quantity
0 1 " 7 1: (07) 5 1 " 10 "	(Plant)
Combustion Turbine (CT) Foundation and Connections	2
CT Mechanical Accessories (e.g. lube oil cooler, static motor starter, NO _*	2
control system, compressor wash system, fire detection system, fuel	
heating system, etc.) Foundation(s) and Connections	
CT Structure Shell and Façade Foundation and Connections	2
CT Inlet Air Plenum and Filter Structure, Foundation and Connections	2
CT Inlet Air Fogger Foundation and Connections	2
Combustion Turbine Generator (CTG) Foundation and Connections	2
Heat Recovery Steam Generator (HRSG) Structure, Foundation and	2
Connections	
HRSG Exhaust Stack, Foundation and Connections	2
HRSG Transition Duct Burner and Forced Draft Structure, Foundations	2
and Connections	
Selective Catalytic Reduction (SCR) Unit Foundation and Connections	2
Steam Turbine (ST) Foundation and Connections	4
ST Structure Shell and Façade Foundation and Connections	4
Steam Turbine Generator (STG) Foundation and Connections	4
STG Lube Oil Skid Foundation and Connections	4
STG Hydraulic Control System Foundation and Connections	4
Pipe and Cable Way Structures, Foundations and Connections	1 Lot
Electrical MCC, Foundation and Connections	1 Lot
18 kV Auxiliary Step-Down Transformer Foundation and Connections	2
500 kV Step-Up Transformer Foundation and Connections	3
Transformer (4,160 to 480 Volt) Foundation(s) and Connections	1 Lot
Electrical Power Supply System	1 Lot
Electrical Control Centers, Switchgear and Switchyard Equipment	1 Lot
Foundations and Connections	

Equipment/System	Quantity (Plant)
Power Distribution Center Foundation and Connections	1 Lot
Generator – 1.000 kW Emergency Foundation and Connections	4
Natural Gas Filter/Scrubber/Separator Foundation and Connections	1 Lot
Natural Gas Separator/Heater Foundation and Connections	1 Lot
Natural Gas Metering and Regulating Station Foundations and	1 Lot
Connections	
All Building Structures, Foundations and Connections (e.g. Administrative, Control Room, Fire Water Pump House, Water Treatment, Maintenance, Cooling Tower Electrical/Chemical, Warehouse, Raw Water Pump Station, Medium Voltage Switchgear, MCC, etc.)	1 Lot
Skid - Ammonia Blower Injection Foundation and Connections	1 Lot
Tank - Ammonia Storage, Foundation and Connections	1 Lot
Tank - Recycled/Raw Water, Foundation and Connections	4
Tank - Fire Water, Foundation and Connections	1
Tank - Oily Water Separator, Foundation and Connections	1 Lot
Tank – Service Water Foundation and Connections	1
Tank - Condensate Surge, Foundation and Connections	1
Tank – Demineralized Water, Foundation and Connections	2
Tank – Boiler Blowdown, Foundation and Connections	1 Lot
Tank – Water Treatment Facilities Foundation and Connections (as	1 Lot
required by CBC)	1 200
Pump – Diesel Fire Water Pump Skid Foundation and Connections	1
Pump – HSRG Feedwater Foundation and Connections	1 Lot
Pump – Boiler Water Feed Pump Foundation and Connections	1 Lot
Pump – Demineralized Water Transfer Pump Foundation and	1 Lot
Connections	
Pump - Recycled Water Shipping Pump Station, Foundations and	1 Lot
Connections Developer Developer Chatian Foundations and Connections	41.54
Pump – Raw Water Pump Station, Foundations and Connections	1 Lot
Pump – Condensate Pump Foundation and Connections	1 Lot
Pump – Auxiliary Cooling Water	1 Lot
Pump - Circulating Cooling Water Foundation and Connections	1 Lot
Pumps – Water Treatment and Cooling Systems Foundation and Connections (as required by CBC)	1 Lot
Cooling Tower – Mechanical Draft Evaporative Structure, Foundation and Connections	1 Lot
Boiler - Auxiliary, Stack, Foundation and Connections	1 Lot
Auxiliary Boiler SCR System Foundation and Connections	1 Lot
Ammonia Injection Skid Foundation and Connections	1 Lot
Compressors – Air Foundation(s) and Connections	1 Lot
Compressors – Fuel Gas Foundation(s) and Connections	1 Lot
Pipeline – Natural Gas	1
Pipeline – Recycled Water	4
Pipeline – Waste Water	4
Pipeline – Potable Water	1
Potable Water Systems	1 Lot
Chemical Containment Systems	1 Lot
Fire Suppression Systems	1 Lot

Equipment/System	Quantity
	(Plant)
Drainage Systems (including sanitary, storm drain, and waste)	1 Lot
Roadways and Retaining Walls	1 Lot
Storm Water Retention Basin	1 Lot
Building Energy Conservation Systems	1 Lot
Temperature Control and Ventilation Systems (including water and sewer	1 Lot
connections)	
High Pressure Piping	1 Lot
HVAC and Refrigeration Systems	1 Lot

Table 1: Major Structures and Equipment List

Equipment/System	Quantity (Plant)
Combustion Turbine (CT) Foundation and Connections	<u>2</u>
Combustion Turbine Generator Foundation and Connections	<u>2</u>
Steam Turbine (ST) Foundation and Connections	<u>1</u>
Steam Turbine Generator Foundation and Connections	<u>1</u>
Heat Recovery Steam Generator (HRSG) Structure, Foundation and Connections	<u>2</u>
HRSG Stack Structure, Foundation and Connections	<u>2</u>
CT Air Inlet System Structure, Foundation and Connections	<u>2</u>
CT Main Transformer Foundation and Connections	<u>2</u>
ST Main Transformer Foundation and Connections	1
Unit Auxiliary Transformer Foundation and Connections	<u>2</u>
Generator Breakers Foundation and Connections	<u>2</u>
Water Treatment Building Structure, Foundation and Connections	<u>1</u>
Administration & Maintenance Building and Control Room Structure, Foundation and Connections	1
Medium Voltage Switchgear Building Structure, Foundation and Connections	<u>1</u>
Auxiliary Cooling Water Pump Foundation and Connections	<u>1</u>
Circulating Water Pumps Foundation and Connections	<u>2</u>
Boiler Feed Pumps Foundation and Connections	<u>4</u>
Cooling Tower Structure, Foundation and Connections	<u>1</u>
Cooling Tower Electrical Building Structure, Foundation and Connections	<u>1</u>
Cooling Tower Chemical Feed Foundation and Connections	<u>1</u>
Fire Water Tank Structure, Foundation and Connections	<u>1</u>
Demineralized Water Storage Tank Structure, Foundation and Connections	<u>1</u>
Condensate Surge Tank Structure, Foundation and Connections	<u>1</u>
Ammonia Storage Tank Foundation and Connections	<u>2</u>
Switchyard Control Building Structure, Foundation and Connections	<u>1</u>
HRSG Blowdown Tank Structure, Foundation and Connections	<u>2</u>
Ammonia Injection Skid Foundation and Connections	<u>2</u>

Equipment/System	Quantity (Plant)
HRSG Duct Burner Skid Foundation and Connections	<u>2</u>
Condenser and Auxiliaries Foundation and Connections	<u>1</u>
Auxiliary Transformer Foundation and Connections	2
Fire Pump Skid Foundation and Connections	<u>1</u>
Recycled Water Tank Structure, Foundation and Connections	<u>1</u>
Condensate Pumps Foundation and Connections	<u>3</u>
Non-Reclaimable Wastewater Tank Structure, Foundation and Connections	<u>1</u>
Fire Protection System	<u>1</u>
Auxiliary Boiler Foundation and Connections	<u>1</u>
Standby Generator Foundation and Connections	1
High Pressure and Large Diameter Piping	<u>1 Lot</u>
Switchyard, Buses and Towers	<u>1 Lot</u>

GEN-3 The project owner shall make payments to the CBO for design review, plan check and construction inspection based upon a reasonable fee schedule to be negotiated between the project owner and the CBO. These fees may be consistent with the fees listed in the 19982001 CBC [Chapter 1, Section 107 and Table 1-A, Building Permit Fees; Appendix Chapter 33, Section 3310 and Table A-33-A, Grading Plan Review Fees; and Table A-33-B, Grading Permit Fees], adjusted for inflation and other appropriate adjustments; may be based on the value of the facilities reviewed; may be based on hourly rates; or may be as otherwise agreed by the project owner and the CBO.

<u>Verification:</u> The project owner shall make the required payments to the CBO in accordance with the agreement between the project owner and the CBO. The project owner shall send a copy of the CBO's receipt of payment to the CPM in the next Monthly Compliance Report indicating that the applicable fees have been paid.

GEN-4 Prior to the start of rough grading, the project owner shall assign a California registered architect, structural engineer or civil engineer, as a resident engineer (RE), to be in general responsible charge of the project [Building Standards Administrative Code (Cal Code of Regs., tit. 24, § 4-209, Designation of Responsibilities)]. All transmission facilities (lines, switchyards, switching stations and substations) are handled in conditions of certification in the **Transmission System Engineering** section of this document.

The RE may delegate responsibility for portions of the project to other registered engineers. Registered mechanical and electrical engineers may be delegated responsibility for mechanical and electrical portions of the project respectively. A project may be divided into parts, provided each part is clearly defined as a distinct unit. Separate assignment of general responsible charge may be made for each designated part.

The RE shall:

- Monitor construction progress of work requiring CBO design review and inspection to ensure compliance with LORS;
- 2. Ensure that construction of all the facilities subject to CBO design review and inspection conforms in every material respect to the applicable LORS, these conditions of certification, approved plans, and specifications;
- Prepare documents to initiate changes in the approved drawings and specifications when directed by the project owner or as required by conditions on the project;
- Be responsible for providing the project inspectors and testing agency(ies) with complete and up-to-date set(s) of stamped drawings, plans, specifications and any other required documents;
- 5. Be responsible for the timely submittal of construction progress reports to the CBO from the project inspectors, the contractor, and other engineers who have been delegated responsibility for portions of the project; and
- 6. Be responsible for notifying the CBO of corrective action or the disposition of items noted on laboratory reports or other tests as not conforming to the approved plans and specifications.

The RE shall have the authority to halt construction and to require changes or remedial work, if the work does not conform to applicable requirements.

If the RE or the delegated engineers are reassigned or replaced, the project owner shall submit the name, qualifications and registration number of the newly assigned engineer to the CBO for review and approval. The project owner shall notify the CPM of the CBO's approval of the new engineer.

<u>Verification:</u> At least 30 days (or project owner and CBO approved alternative timeframe) prior to the start of rough grading, the project owner shall submit to the CBO for review and approval, the resume and registration number of the RE and any other delegated engineers assigned to the project. The project owner shall notify the CPM of the CBO's approvals of the RE and other delegated engineer(s) within five days of the approval.

If the RE or the delegated engineer(s) are subsequently reassigned or replaced, the project owner has five days in which to submit the resume and registration number of the newly assigned engineer to the CBO for review and approval. The project owner shall notify the CPM of the CBO's approval of the new engineer within five days of the approval.

GEN-5 Prior to the start of construction, the project owner shall assign at least one of each of the following California registered engineers to the project: A) a civil engineer; B) a geotechnical engineer or a civil engineer experienced and knowledgeable in the practice of soils engineering; C) a design engineer, who is either a structural engineer or a civil engineer fully competent and proficient in the design of power plant structures and equipment supports; D) a

mechanical engineer; and E) an electrical engineer. [California Business and Professions Code section 6704 et seq., and sections 6730 and 6736 requires state registration to practice as a civil engineer or structural engineer in California.] All transmission facilities (lines, switchyards, switching stations and substations) are handled in conditions of certification in the **Transmission System Engineering** section of this document.

The tasks performed by the civil, mechanical, electrical or design engineers may be divided between two or more engineers, as long as each engineer is responsible for a particular segment of the project (e.g., proposed earthwork, civil structures, power plant structures, equipment support). No segment of the project shall have more than one responsible engineer. The transmission line may be the responsibility of a separate California registered electrical engineer.

The project owner shall submit to the CBO for review and approval, the names, qualifications and registration numbers of all responsible engineers assigned to the project [19982001] CBC, Section 104.2, Powers and Duties of Building Official].

If any one of the designated responsible engineers is subsequently reassigned or replaced, the project owner shall submit the name, qualifications and registration number of the newly assigned responsible engineer to the CBO for review and approval. The project owner shall notify the CPM of the CBO's approval of the new engineer.

A: The civil engineer shall:

- Design, or be responsible for design, stamp, and sign all plans, calculations and specifications for proposed site work, civil works and related facilities requiring design review and inspection by the CBO. At a minimum, these include: grading, site preparation, excavation, compaction, construction of secondary containment, foundations, erosion and sedimentation control structures, drainage facilities, underground utilities, culverts, site access roads and sanitary sewer systems; and
- Provide consultation to the RE during the construction phase of the project and recommend changes in the design of the civil works facilities and changes in the construction procedures.
- B: The geotechnical engineer or civil engineer, experienced and knowledgeable in the practice of soils engineering, shall:
 - 1. Review all the engineering geology reports and prepare final soils grading report;
 - 2. Prepare the soils engineering reports required by the <u>19982001</u> CBC, Appendix Chapter 33, Section 3309.5, Soils Engineering Report; and Section 3309.6, Engineering Geology Report;

- 3. Be present, as required, during site grading and earthwork to provide consultation and monitor compliance with the requirements set forth in the 19982001 CBC, Appendix Chapter 33; Section 3317, Grading Inspections;
- 4. Recommend field changes to the civil engineer and RE;
- 5. Review the geotechnical report, field exploration report, laboratory tests and engineering analyses detailing the nature and extent of the site soils that may be susceptible to liquefaction, rapid settlement or collapse when saturated under load; and
- 6. Prepare reports on foundation investigation to comply with the 19982001 CBC, Chapter 18 section 1804, Foundation Investigations.

This engineer shall be authorized to halt earthwork and to require changes if site conditions are unsafe or do not conform with predicted conditions used as a basis for design of earthwork or foundations [19982001] CBC, section 104.2.4, Stop orders].

C: The design engineer shall:

- 1. Be directly responsible for the design of the proposed structures and equipment supports;
- 2. Provide consultation to the RE during design and construction of the project;
- 3. Monitor construction progress to ensure compliance with engineering LORS:
- 4. Evaluate and recommend necessary changes in design; and
- 5. Prepare and sign all major building plans, specifications and calculations.
- D: The mechanical engineer shall be responsible for, and sign and stamp a statement with, each mechanical submittal to the CBO, stating that the proposed final design plans, specifications, and calculations conform with all of the mechanical engineering design requirements set forth in the Energy Commission's Decision.

E: The electrical engineer shall:

- 1. Be responsible for the electrical design of the project; and
- 2. Sign and stamp electrical design drawings, plans, specifications, and calculations.

<u>Verification:</u> At least 30 days (or project owner and CBO approved alternative timeframe) prior to the start of rough grading, the project owner shall submit to the CBO for review and approval, resumes and registration numbers of all the responsible engineers assigned to the project. The project owner shall notify the CPM of the CBO's approvals of the engineers within five days of the approval.

If the designated responsible engineer is subsequently reassigned or replaced, the project owner has five days in which to submit the resume and registration number of the newly assigned engineer to the CBO for review and approval. The project owner shall notify the CPM of the CBO's approval of the new engineer within five days of the approval.

Prior to the start of an activity requiring special inspection, the project owner shall assign to the project, qualified and certified special inspector(s) who shall be responsible for the special inspections required by the 49982001 CBC, Chapter 17 [Section 1701, Special Inspections; Section 1701.5, Type of Work (requiring special inspection)]; and Section 106.3.5, Inspection and observation program. All transmission facilities (lines, switchyards, switching stations and substations) are handled in conditions of certification in the **Transmission System Engineering** section of this document.

The special inspector shall:

GEN-6

- 1. Be a qualified person who shall demonstrate competence, to the satisfaction of the CBO, for inspection of the particular type of construction requiring special or continuous inspection;
- 2. Observe the work assigned for conformance with the approved design drawings and specifications;
- Furnish inspection reports to the CBO and RE. All discrepancies shall be brought to the immediate attention of the RE for correction, then, if uncorrected, to the CBO and the CPM for corrective action [19982001 CBC, Chapter 17, Section 1701.3, Duties and Responsibilities of the Special Inspector]; and
- 4. Submit a final signed report to the RE, CBO, and CPM, stating whether the work requiring special inspection was, to the best of the inspector's knowledge, in conformance with the approved plans and specifications and the applicable provisions of the applicable edition of the CBC.

A certified weld inspector, certified by the American Welding Society (AWS), and/or American Society of Mechanical Engineers (ASME) as applicable, shall inspect welding performed on-site requiring special inspection (including structural, piping, tanks and pressure vessels).

<u>Verification:</u> At least 15 days (or project owner and CBO approved alternative timeframe) prior to the start of an activity requiring special inspection, the project owner shall submit to the CBO for review and approval, with a copy to the CPM, the name(s) and qualifications of the certified weld inspector(s), or other certified special inspector(s) assigned to the project to perform one or more of the duties set forth above. The project owner shall also submit to the CPM a copy of the CBO's approval of the qualifications of all special inspectors in the next Monthly Compliance Report.

If the special inspector is subsequently reassigned or replaced, the project owner has five days in which to submit the name and qualifications of the newly assigned special inspector to the CBO for approval. The project owner shall notify the CPM of the CBO's approval of the newly assigned inspector within five days of the approval.

GEN-7 If any discrepancy in design and/or construction is discovered in any engineering work that has undergone CBO design review and approval, the project owner shall document the discrepancy and recommend the corrective action required [19982001] CBC, Chapter 1, Section 108.4, Approval Required; Chapter 17, Section 1701.3, Duties and Responsibilities of the Special Inspector; Appendix Chapter 33, Section 3317.7, Notification of Noncompliance]. The discrepancy documentation shall be submitted to the CBO for review and approval. The discrepancy documentation shall reference this Condition of Certification and, if appropriate, the applicable sections of the CBC and/or other LORS.

<u>Verification:</u> The project owner shall transmit a copy of the CBO's approval of any corrective action taken to resolve a discrepancy to the CPM in the next Monthly Compliance Report. If any corrective action is disapproved, the project owner shall advise the CPM, within five days, of the reason for disapproval and the revised corrective action to obtain CBO's approval.

The project owner shall obtain the CBO's final approval of all completed work that has undergone CBO design review and approval. The project owner shall request the CBO to inspect the completed structure and review the submitted documents. When the work and the "as-built" and "as graded" plans conform to the approved final plans, the project owner shall notify the CPM regarding the CBO's final approval. The marked up "as-built" drawings for the construction of structural and architectural work shall be submitted to the CBO. Changes approved by the CBO shall be identified on the "as-built" drawings [19982001 CBC, Section 108, Inspections]. The project owner shall retain one set of approved engineering plans, specifications and calculations at the project site or at another accessible location during the operating life of the project [19982001 CBC, Section 106.4.2, Retention of Plans].

<u>Verification:</u> Within 15 days of the completion of any work, the project owner shall submit to the CBO, with a copy to the CPM in the next Monthly Compliance Report, (a) a written notice that the completed work is ready for final inspection, and (b) a signed statement that the work conforms to the final approved plans. After storing final approved engineering plans, specifications and calculations as described above, the project owner shall submit to the CPM a letter stating that the above documents have been stored and indicate the storage location of such documents.

CIVIL-1 The project owner shall submit to the CBO for review and approval the following:

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- 1. Design of the proposed drainage structures and the grading plan;
- 2. An erosion and sedimentation control plan;
- 3. Related calculations and specifications, signed and stamped by the responsible civil engineer; and
- 4. Soils report as required by the <u>19982001</u> CBC [Appendix Chapter 33, Section 3309.5, Soils Engineering Report; and Section 3309.6, Engineering Geology Report].

<u>Verification:</u> At least 15 days (or project owner and CBO approved alternative timeframe) prior to the start of site grading the project owner shall submit the documents described above to the CBO for design review and approval. In the next Monthly Compliance Report following the CBO's approval, the project owner shall submit a written statement certifying that the documents have been approved by the CBO.

CIVIL-2 The resident engineer shall, if appropriate, stop all earthwork and construction in the affected areas when the responsible geotechnical engineer or civil engineer experienced and knowledgeable in the practice of soils engineering identifies unforeseen adverse soil or geologic conditions. The project owner shall submit modified plans, specifications and calculations to the CBO based on these new conditions. The project owner shall obtain approval from the CBO before resuming earthwork and construction in the affected area [19982001 CBC, Section 104.2.4, Stop orders].

<u>Verification:</u> The project owner shall notify the CPM within 24 hours, when earthwork and construction is stopped as a result of unforeseen adverse geologic/soil conditions. Within 24 hours of the CBO's approval to resume earthwork and construction in the affected areas, the project owner shall provide to the CPM a copy of the CBO's approval.

CIVIL-3 The project owner shall perform inspections in accordance with the <u>19982001</u> CBC, Chapter 1, Section 108, Inspections; Chapter 17, Section 1701.6, Continuous and Periodic Special Inspection; and Appendix Chapter 33, Section 3317, Grading Inspection. All plant site-grading operations for which a grading permit is required shall be subject to inspection by the CBO.

If, in the course of inspection, it is discovered that the work is not being performed in accordance with the approved plans, the discrepancies shall be reported immediately to the resident engineer, the CBO and the CPM [19982001 CBC, Appendix Chapter 33, Section 3317.7, Notification of Noncompliance]. The project owner shall prepare a written report detailing all discrepancies and non-compliance items, and the proposed corrective action, and send copies to the CBO and the CPM.

<u>Verification:</u> Within five days of the discovery of any discrepancies, the resident engineer shall transmit to the CBO and the CPM a Non-Conformance Report (NCR) and the proposed corrective action. Within five days of resolution of the NCR, the project owner shall submit the details of the corrective action to the CBO and the CPM. A list of NCRs, for the reporting month, shall also be included in the following Monthly Compliance Report.

CIVIL-4 After completion of finished grading and erosion and sedimentation control and drainage facilitieswork, the project owner shall obtain the CBO's approval of the final "as-graded" grading plans (including final changes)and final "as-built" plans for the erosion and sedimentation control facilities work. The civil engineer shall state that the work within his/her area of responsibility was done in accordance with the final approved plans [19982001] CBC, Section 109, Certificate of Occupancy3318, Completion of Work].

<u>Verification:</u> Within 30 days of the completion of the erosion and sediment control mitigation and drainage <u>facilitieswork</u>, the project owner shall submit to the CBO, <u>for review and approval</u>, <u>the final grading plan (including final changes) and</u> the responsible civil engineer's signed statement that the installation of the facilities and all erosion control measures were completed in accordance with the final approved combined grading plans, and that the facilities are adequate for their intended purposes. The project owner shall submit a copy of <u>this report the CBO's approval</u> to the CPM in the next Monthly Compliance Report.

- **STRUC-1** Prior to the start of any increment of construction of any major structure or component listed in **Table 1** of Condition of Certification **GEN-2**, above, the project owner shall submit to the CBO for design review and approval the proposed lateral force procedures for project structures and the applicable designs, plans and drawings for project structures. Proposed lateral force procedures, designs, plans and drawings shall be those for the following items (from **Table 1**, above):
 - 1. Major project structures;
 - 2. Major foundations, equipment supports and anchorage;
 - 3. Large field fabricated tanks;
 - 4. Turbine/generator pedestal; and
 - 5. Switchyard structures.

Construction of any structure or component shall not commence until the CBO has approved the lateral force procedures to be employed in designing that structure or component.

The project owner shall:

- 1. Obtain approval from the CBO of lateral force procedures proposed for project structures;
- 2. Obtain approval from the CBO for the final design plans, specifications, calculations, soils reports and applicable quality control procedures. If there are conflicting requirements, the more stringent shall govern (i.e., highest loads, or lowest allowable stresses shall govern). All plans, calculations and specifications for foundations that support structures shall be filed concurrently with the structure plans, calculations and specifications [19982001] CBC, Section 108.4, Approval Required];
- 3. Submit to the CBO the required number of copies of the structural plans, specifications, calculations and other required documents of the designated major structures at least 60 days (or a lesser number of days mutually agreed to by the project owner and the CBO) prior to the start of on-site fabrication and installation of each structure, equipment support, or foundation [19982001 CBC, Section 106.4.2, Retention of plans; and Section 106.3.2, Submittal documents]; and

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4. Ensure that the final plans, calculations and specifications clearly reflect the inclusion of approved criteria, assumptions and methods used to develop the design. The final designs, plans, calculations and specifications shall be signed and stamped by the responsible design engineer [19982001 CBC, Section 106.3.4, Architect or Engineer of Record].

<u>Verification:</u> At least 30 days (or project owner and CBO approved alternative timeframe) prior to the start of any increment of construction of any structure or component listed in Table 1 of Condition of Certification GEN-2 above, the project owner shall submit to the CBO, with a copy to the CPM, the responsible design engineer's signed statement that the final design plans, specifications and calculations conform with all of the requirements set forth in the Energy Commission's Decision.

If the CBO discovers non-conformance with the stated requirements, the project owner shall resubmit the corrected plans to the CBO within 20 days of receipt of the nonconforming submittal with a copy of the transmittal letter to the CPM.

The project owner shall submit to the CPM a copy of a statement from the CBO that the proposed structural plans, specifications and calculations have been approved and are in conformance with the requirements set forth in the applicable engineering LORS.

- **STRUC-2** The project owner shall submit to the CBO the required number of sets of the following documents related to work that has undergone CBO design review and approval:
 - Concrete cylinder strength test reports (including date of testing, date sample taken, design concrete strength, tested cylinder strength, age of test, type and size of sample, location and quantity of concrete placement from which sample was taken, and mix design designation and parameters);
 - 2. Concrete pour sign-off sheets;
 - 3. Bolt torque inspection reports (including location of test, date, bolt size, and recorded torques);
 - 4. Field weld inspection reports (including type of weld, location of weld, inspection of non-destructive testing (NDT) procedure and results, welder qualifications, certifications, qualified procedure description or number (ref: AWS); and
 - Reports covering other structural activities requiring special inspections shall be in accordance with the <u>19982001</u> CBC, Chapter 17, Section 1701, Special Inspections; Section 1701.5, Type of Work (requiring special inspection); Section 1702, Structural Observation and Section 1703, Nondestructive Testing.

<u>Verification:</u> If a discrepancy is discovered in any of the above data, the project owner shall, within five days, prepare and submit an NCR describing the nature of the discrepancies to the CBO, with a copy of the transmittal letter to the CPM [19982001 CBC, Chapter 17, Section 1701.3, Duties and Responsibilities of the Special Inspector]. The NCR shall reference the Condition(s) of Certification and the applicable CBC

chapter and section. Within five days of resolution of the NCR, the project owner shall submit a copy of the corrective action to the CBO and the CPM.

The project owner shall transmit a copy of the CBO's approval or disapproval of the corrective action to the CPM within 15 days. If disapproved, the project owner shall advise the CPM, within five days, the reason for disapproval, and the revised corrective action to obtain CBO's approval.

STRUC-3 The project owner shall submit to the CBO design changes to the final plans required by the <u>19982001</u> CBC, Chapter 1, Section 106.3.2, Submittal documents and Section 106.3.3, Information on plans and specifications, including the revised drawings, specifications, calculations, and a complete description of, and supporting rationale for, the proposed changes, and shall give the CBO prior notice of the intended filing.

<u>Verification:</u> On a schedule suitable to the CBO, the project owner shall notify the CBO of the intended filing of design changes, and shall submit the required number of sets of revised drawings and the required number of copies of the other abovementioned documents to the CBO, with a copy of the transmittal letter to the CPM. The project owner shall notify the CPM, via the Monthly Compliance Report, when the CBO has approved the revised plans.

STRUC-4 Tanks and vessels containing quantities of toxic or hazardous materials exceeding amounts specified in Chapter 3, Table 3-E of the <u>19982001</u> CBC shall, at a minimum, be designed to comply with Occupancy Category 2 of the <u>1998the requirements</u> of that chapter-CBC.

<u>Verification:</u> At least 30 days (or project owner and CBO approved alternate timeframe) prior to the start of installation of the tanks or vessels containing the above specified quantities of toxic or hazardous materials, the project owner shall submit to the CBO for design review and approval final design plans, specifications and calculations, including a copy of the signed and stamped engineer's certification.

The project owner shall send copies of the CBO approvals of plan checks to the CPM in the following Monthly Compliance Report. The project owner shall also transmit a copy of the CBO's inspection approvals to the CPM in the Monthly Compliance Report following completion of any inspection.

MECH-1 The project owner shall submit, for CBO design review and approval, the proposed final design, specifications and calculations for each plant major piping and plumbing system listed in Table 1, Condition of Certification GEN 2, above. Physical layout drawings and drawings not related to code compliance and life safety need not be submitted. The submittal shall also include the applicable QA/QC procedures. Upon completion of construction of any such major piping or plumbing system, the project owner shall request the CBO's inspection approval of said construction [19982001 CBC, Section 106.3.2, Submittal Documents; Section 108.3, Inspection Requests; Section 108.4, Approval Required; 19982001 California Plumbing Code, Section 103.5.4, Inspection Request; Section 301.1.1, Approval].

The responsible mechanical engineer shall stamp and sign all plans, drawings and calculations for the major piping and plumbing systems subject to the CBO design review and approval, and submit a signed statement to the CBO when the said proposed piping and plumbing systems have been designed, fabricated and installed in accordance with all of the applicable laws, ordinances, regulations and industry standards [Section 106.3.4, Architect or Engineer of Record], which may include, but not be limited to:

- American National Standards Institute (ANSI) B31.1 (Power Piping Code);
- ANSI B31.2 (Fuel Gas Piping Code);
- ANSI B31.3 (Chemical Plant and Petroleum Refinery Piping Code);
- ANSI B31.8 (Gas Transmission and Distribution Piping Code);
- Title 24, California Code of Regulations, Part 5 (California Plumbing Code);
- Title 24, California Code of Regulations, Part 6 (California Energy Code, for building energy conservation systems and temperature control and ventilation systems);
- Title 24, California Code of Regulations, Part 2 (California Building Code);
 and
- Specific City/County code.

The CBO may deputize inspectors to carry out the functions of the code enforcement agency [19982001 CBC, Section 104.2.2, Deputies].

<u>Verification:</u> At least 30 days (or project owner and CBO approved alternative timeframe) prior to the start of any increment of major piping or plumbing construction listed in Table 1, Condition of Certification GEN-2 above, the project owner shall submit to the CBO for design review and approval the final plans, specifications and calculations, including a copy of the signed and stamped statement from the responsible mechanical engineer certifying compliance with the applicable LORS, and shall send the CPM a copy of the transmittal letter in the next Monthly Compliance Report.

The project owner shall transmit to the CPM, in the Monthly Compliance Report following completion of any inspection, a copy of the transmittal letter conveying the CBO's inspection approvals.

MECH-2 For all pressure vessels installed in the plant, the project owner shall submit to the CBO and California Occupational Safety and Health Administration (Cal-OSHA), prior to operation, the code certification papers and other documents required by the applicable LORS. Upon completion of the installation of any pressure vessel, the project owner shall request the appropriate CBO and/or Cal-OSHA inspection of said installation [19982001 CBC, Section 108.3, Inspection Requests].

The project owner shall:

- Ensure that all boilers and fired and unfired pressure vessels are designed, fabricated and installed in accordance with the appropriate section of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, or other applicable code. Vendor certification, with identification of applicable code, shall be submitted for prefabricated vessels and tanks; and
- 2. Have the responsible design engineer submit a statement to the CBO that the proposed final design plans, specifications and calculations conform to all of the requirements set forth in the appropriate ASME Boiler and Pressure Vessel Code or other applicable codes.

<u>Verification:</u> At least 30 days (or project owner and CBO approved alternative timeframe) prior to the start of on-site fabrication or installation of any pressure vessel, the project owner shall submit to the CBO for design review and approval, the above listed documents, including a copy of the signed and stamped engineer's certification, with a copy of the transmittal letter to the CPM.

The project owner shall transmit to the CPM, in the Monthly Compliance Report following completion of any inspection, a copy of the transmittal letter conveying the CBO's and/or Cal-OSHA inspection approvals.

MECH-3 The project owner shall submit to the CBO for design review and approval the design plans, specifications, calculations and quality control procedures for any heating, ventilating, air conditioning (HVAC) or refrigeration system. Packaged HVAC systems, where used, shall be identified with the appropriate manufacturer's data sheets.

The project owner shall design and install all HVAC and refrigeration systems within buildings and related structures in accordance with the CBC and other applicable codes. Upon completion of any increment of construction, the project owner shall request the CBO's inspection and approval of said construction. The final plans, specifications and calculations shall include approved criteria, assumptions and methods used to develop the design. In addition, the responsible mechanical engineer shall sign and stamp all plans, drawings and calculations and submit a signed statement to the CBO that the proposed final design plans, specifications and calculations conform with the applicable LORS [19982001 CBC, Section 108.7, Other Inspections; Section 106.3.4, Architect or Engineer of Record].

<u>Verification:</u> At least 30 days (or project owner and CBO approved alternative timeframe) prior to the start of construction of any HVAC or refrigeration system, the project owner shall submit to the CBO the required HVAC and refrigeration calculations, plans and specifications, including a copy of the signed and stamped statement from the responsible mechanical engineer certifying compliance with the CBC and other applicable codes, with a copy of the transmittal letter to the CPM.

- ELEC-1 Prior to the start of any increment of electrical construction for electrical equipment and systems 480 volts and higher, listed below, with the exception of underground duct work and any physical layout drawings and drawings not related to code compliance and life safety, the project owner shall submit, for CBO design review and approval, the proposed final design, specifications and calculations [CBC 19982001, Section 106.3.2, Submittal documents]. Upon approval, the above listed plans, together with design changes and design change notices, shall remain on the site or at another accessible location for the operating life of the project. The project owner shall request that the CBO inspect the installation to ensure compliance with the requirements of applicable LORS [19982001 CBC, Section 108.4, Approval Required, and Section 108.3, Inspection Requests]. All transmission facilities (lines, switchyards, switching stations, and substations) are handled in conditions of certification in the Transmission System Engineering section of this document.
 - A. Final plant design plans to include:
 - one-line diagrams for the 13.8 kV, 4.16 kV and 480 V systems; and
 - 2. system grounding drawings.
 - B. Final plant calculations to establish:
 - 1. short-circuit ratings of plant equipment;
 - 2. ampacity of feeder cables;
 - 3. voltage drop in feeder cables;
 - system grounding requirements;
 - 5. coordination study calculations for fuses, circuit breakers and protective relay settings for the 13.8 kV, 4.16 kV and 480 V systems;
 - 6. system grounding requirements; and
 - 7. lighting energy calculations.
 - C. The following activities shall be reported to the CPM in the Monthly Compliance Report:
 - 1. Receipt or delay of major electrical equipment;
 - 2. Testing or energization of major electrical equipment; and
 - 3. A signed statement by the registered electrical engineer certifying that the proposed final design plans and specifications conform to requirements set forth in the Energy Commission Decision.

<u>Verification:</u> At least 30 days (or project owner and CBO approved alternative timeframe) prior to the start of each increment of electrical construction, the project owner shall submit to the CBO for design review and approval the above listed documents. The project owner shall include in this submittal a copy of the signed and stamped statement from the responsible electrical engineer attesting compliance with the applicable LORS, and shall send the CPM a copy of the transmittal letter in the next Monthly Compliance Report.

GEOLOGY AND PALEONTOLOGY

CONDITIONS OF CERTIFICATION

Staff agrees to the following changes to the Conditions of Certification:

General Conditions of Certification with respect to Geology are covered under Conditions of Certification **GEN-1**, **GEN-5**, and **CIVIL-1** in the **Facility Design** section. Conditions of Certification for Paleontology are as follows:

PAL-1 The project owner shall provide the CPM with the resume and qualifications of its Paleontological Resource Specialist (PRS) for review and approval. If the approved PRS is replaced prior to completion of project mitigation and report, the project owner shall obtain CPM approval of the replacement. The project owner shall submit to the CPM to keep on file, resumes of the qualified Paleontological Resource Monitors PRMs. If the PRMs are replaced, the resumes shall also be provided to the CPM.

The PRS resume shall include the names and phone numbers of contacts. The resume shall also demonstrate to the satisfaction of the CPM, the appropriate education and experience to accomplish the required paleontological resource tasks.

As determined by the CPM, the PRS shall meet the minimum qualifications for a vertebrate paleontologist as described in the Society of Vertebrate Paleontology (SVP) guidelines of 1995. The experience of the PRS shall include the following:

- 1. institutional affiliations or appropriate credentials and college degree;
- 2. ability to recognize and collect fossils in the field;
- 3. local geological and biostratigraphic expertise;
- 4. proficiency in identifying vertebrate and invertebrate fossils and;
- In addition, the PRS shall have at least three years of paleontological resource mitigation and field experience in California, and at least one year of experience leading paleontological resource mitigation and field activities.

The project owner shall ensure that the PRS obtains qualified paleontological resource monitors to monitor as necessary on the project. Paleontologic resource monitors (PRMs) shall have the equivalent of the following qualifications:

- 1. BS or BA degree in geology or paleontology and one year experience monitoring in California; or
- 2. AS or AA in geology, paleontology or biology and four years experience monitoring in California; or

3. Enrollment in upper division classes pursuing a degree in the fields of geology or paleontology and two years of monitoring experience in California.

<u>Verification:</u> At least <u>63</u>0 days prior to the start of ground disturbance, the project owner shall submit a resume and statement of availability of its designated PRS for onsite work.

At least 20 days prior to ground disturbance, the PRS or project owner shall provide a letter with resumes naming anticipated monitors for the project and stating that the identified monitors meet the minimum qualifications for paleontological resource monitoring required by the condition. If additional monitors are obtained during the project, the PRS shall provide additional letters and resumes to the CPM. The letter shall be provided to the CPM no later than one week prior to the monitor beginning onsite duties.

Prior to the termination or release of a PRS, the project owner shall submit the resume of the proposed new PRS to the CPM for review and approval. In an emergency, the project owner shall immediately notify the CPM to discuss the qualifications and approval of a short-term replacement while a permanent Paleontological Resource Specialist is proposed to the CPM for consideration.

PAL-2 The project owner shall provide to the PRS and the CPM, for approval, maps and drawings showing the footprint of the power plant and all linear facilities. Maps shall identify all areas of the project where ground disturbance is anticipated. If the PRS requests enlargements or strip maps for linear facility routes, the project owner shall provide copies to the PRS and CPM. The site grading plan and the plan and profile drawings for the utility lines would normally be acceptable for this purpose. The plan drawings should show the location, depth, and extent of all ground disturbances and can be 1 inch = 40 feet to 1 inch = 100 feet range. If the footprint of the power plant or linear facility changes, the project owner shall provide maps and drawings reflecting these changes to the PRS and CPM.

If construction of the project will proceed in phases, maps and drawings may be submitted prior to the start of each phase. A letter identifying the proposed schedule of each project phase shall be provided to the PRS and CPM. Prior to work commencing on affected phases, the project owner shall notify the PRS and CPM of any construction phase scheduling changes.

At a minimum, the project owner shall ensure that the PRS consults weekly with the project superintendent or construction field manager to confirm area(s) to be worked during the next week, until ground disturbance is completed.

<u>Verification:</u> At least 30 days prior to the start of ground disturbance, the project owner shall provide the maps and drawings.

If there are changes to the footprint of the project, revised maps and drawings shall be provided at least 15 days prior to the start of ground disturbance.

f there are changes to the scheduling of the construction phases, the project owner shall submit a letter to the CPM within 5 days of identifying the changes.

PAL-3 The project owner shall ensure that the PRS prepares, and the project owner shall submit to the CPM for review and approval, a Paleontological Resources Monitoring and Mitigation Plan (PRMMP) to identify general and specific measures to minimize potential impacts to significant paleontological resources. Approval of the PRMMP by the CPM shall occur prior to any ground disturbance. The PRMMP shall function as the formal guide for monitoring, collecting and sampling activities and may be modified with CPM approval. This document shall be used as a basis for discussion in the event that on-site decisions or changes are proposed. Copies of the PRMMP shall reside with the PRS, each monitor, the project owner's on-site manager, and the CPM.

The PRMMP shall be developed in accordance with the guidelines of the Society of the Vertebrate Paleontology (SVP, 1995) and shall include, but not be limited to, the following:

Assurance that the performance and sequence of project-related tasks, such as any literature searches, pre-construction surveys, worker environmental training, fieldwork, flagging or staking; construction monitoring; mapping and data recovery; fossil preparation and collection; identification and inventory; preparation of final reports; and transmittal of materials for curation will be performed according to the PRMMP procedures;

Identification of the person(s) expected to assist with each of the tasks identified within the PRMMP and all conditions for certification:

A thorough discussion of the anticipated geologic units expected to be encountered, the location and depth of the units relative to the project when known, and the known sensitivity of those units based on the occurrence of fossils either in that unit or in correlative units;

An explanation of why, how, and how much sampling is expected to take place and in what units. Include descriptions of different sampling procedures that shall be used for fine-grained and coarse-grained beds;

A discussion of the locations of where the monitoring of project construction activities is deemed necessary, and a proposed schedule for the monitoring;

A discussion of the procedures to be followed in the event of a significant fossil discovery, including notifications;

A discussion of equipment and supplies necessary for collection of fossil materials and any specialized equipment needed to prepare, remove, load, transport, and analyze large-sized fossils or extensive fossil deposits;

Procedures for inventory, preparation, and delivery for curation into a retrievable storage collection in a public repository or museum, which meets the Society of Vertebrate Paleontology standards and requirements for the curation of paleontological resources; and

Identification of the institution that has agreed to receive any data and fossil materials collected, requirements or specifications for materials delivered for curation and how they will be met, and the name and phone number of the contact person at the institution; and,

A copy of the paleontological conditions of certification.

<u>Verification:</u> At least (30) days prior to ground disturbance, the project owner shall provide a copy of the PRMMP. The PRMMP shall include an affidavit of authorship by the PRS, and acceptance of the project owner evidenced by a signature.

PAL-4 Prior to ground disturbance and for the duration of construction, the project owner and the PRS shall prepare and conduct weekly CPM-approved training for all project managers, construction supervisors and workers who are involved with or operate ground disturbing equipment or tools. Workers shall not excavate in sensitive units prior to receiving CPM-approved worker training. Worker training shall consist of an initial in-person PRS training during the project kick-off for those mentioned above. Following initial training, a CPM-approved video or in-person training may be used for new employees. The training program may be combined with other training programs prepared for cultural and biological resources, hazardous materials, or any other areas of interest or concern.

The Worker Environmental Awareness Program (WEAP) shall address the potential to encounter paleontological resources in the field, the sensitivity and importance of these resources, and the legal obligations to preserve and protect such resources.

The training shall include:

- A discussion of applicable laws and penalties under the law;
- For locations of high sensitivity, good quality photographs or physical examples of vertebrate fossils that may be expected in the area shall be provided;
- Information that the PRS or PRM has the authority to halt or redirect construction in the event of a discovery or unanticipated impact to a paleontological resource;
- Instruction that employees are to halt or redirect work in the vicinity of a find and to contact their supervisor and the PRS or PRM;
- An informational brochure that identifies reporting procedures in the event
 of a discovery; A Certification of Completion of WEAP form signed by each
 worker indicating that they have received the training; and A sticker that
 shall be placed on hard hats indicating that environmental training has
 been completed.

<u>Verification:</u> At least 30 days prior to ground disturbance, the project owner shall submit the proposed WEAP including the brochure with the set of reporting procedures the workers are to follow.

At least 30 days prior to ground disturbance, the project owner shall submit the script and final video to the CPM for approval if the project owner is planning on using a video for interim training.

If an alternate paleontological trainer is requested by the owner, the resume and qualifications of the trainer shall be submitted to the CPM for review and approval. Alternate trainers shall not conduct training prior to CPM authorization.

The project owner shall provide in the Monthly Compliance Report (MCR) the WEAP copies of the Certification of Completion forms with the names of those trained and the trainer or type of training offered that month. The MCR shall also include a running total of all persons who have completed the training to date.

- PAL-5 The project owner shall ensure that the PRS and PRM(s) monitors consistent with the PRMMP, all construction-related grading, excavation, trenching, and augering in areas where potentially fossil-bearing materials have been identified. In the event that the PRS determines full time monitoring is not necessary in locations that were identified as potentially fossil-bearing in the PRMMP, the project owner shall notify and seek the concurrence of the CPM.
 - The project owner shall ensure that the PRS and PRM(s) have the authority to halt or redirect construction if <u>potentially significant</u> paleontological resources are encountered <u>in the judgement of the PRS</u>. The project owner shall ensure that there is no interference with monitoring activities unless directed by the PRS. Monitoring activities shall be conducted as follows:
 - 1) Any change of monitoring different from the accepted schedule presented in the PRMMP shall be proposed in a letter or email from the PRS and the project owner to the CPM prior to the change in monitoring. The letter or email shall include the justification for the change in monitoring and submitted to the CPM for review and approval.
 - 2) The project owner shall ensure that the PRM(s) keeps a daily log of monitoring of paleontological resource activities. The PRS may informally discuss paleontological resource monitoring and mitigation activities with the CPM at any time.
 - 3) The project owner shall ensure that the PRS immediately notifies the CPM of any incidents of non-compliance with any paleontological resources conditions of certification. The PRS shall recommend corrective action to resolve the issues or achieve compliance with the conditions of certification.
 - 4) For any significant paleontological resources encountered, either the project owner or the PRS shall notify the CPM immediately (no later than the following morning after the find, or Monday morning in the case of a weekend) of any halt of construction activities.
 - The project owner shall ensure that the PRS prepares a summary of the monitoring and other paleontological activities that will be placed in the Monthly Compliance Reports. The summary will include the name(s) of PRS or monitor(s) active during the month; general descriptions of training and monitored construction activities and general locations of excavations,

grading, etc. A section of the report will include the geologic units or subunits encountered; descriptions of sampling within each unit; and a list of fossils identified in the field. A final section of the report will address any issues or concerns about the project relating to paleontologic monitoring including any incidents of non-compliance and any changes to the monitoring plan that have been approved by the CPM. If no monitoring took place during the month, the project shall include an explanation in the summary as to why monitoring was not conducted.

<u>Verification:</u> The project owner shall ensure that the PRS submits the summary of monitoring and paleontological activities in the MCR.

PAL-6 The project owner, through the designated PRS, shall ensure the collection, preparation for analysis, analysis, identification and inventory, the preparation for curation, and the delivery for curation of all significant paleontological resource materials encountered and collected during the monitoring, data recovery, mapping, and mitigation activities related to the project.

<u>Verification:</u> The project owner shall maintain in their compliance file copies of signed contracts or agreements with the designated PRS and other qualified research specialists. The project owner shall maintain these files for a period of three years after completion and approval of the CPM-approved PRR. The project owner shall be responsible to pay any curation fees <u>chargedrequired</u> by the museum for fossils collected and curated as a result of paleontological monitoring and mitigation.

PAL-7 The project owner shall ensure preparation of a Paleontological Resources Report (PRR) by the designated PRS. The PRR shall be prepared following completion of the ground disturbing activities. The PRR shall include an analysis of the collected fossil materials and related information and submitted to the CPM for review and approval.

The report shall include, but not be limited to, a description and inventory of recovered fossil materials; a map showing the location of paleontological resources encountered; determinations of sensitivity and significance; and a statement by the PRS that project impacts to paleontological resources have been mitigated.

<u>Verification:</u> Within (90) days after completion of ground disturbing activities, including landscaping, the project owner shall submit the Paleontological Resources Report under confidential cover.

TRANSMISSION SYSTEM ENGINEERING

CONDITIONS OF CERTIFICATION

Staff agrees to the following changes to the Conditions of Certification:

- TSE-1 The project owner shall ensure that the design, construction and operation of the proposed transmission facilities shall conform to all applicable LORS including the requirements 1a) through 1f) listed below. The substitution of Compliance project manager (CPM) approved "equivalent" equipment and an equivalent substation configuration is acceptable.
 - a) The power plant switchyard and outlet lines shall meet or exceed the electrical, mechanical, civil and structural requirements of SCE interconnection standards, Cal-ISO Interconnection Requirements, SCE's Detailed Facilities Study (DFS), CPUC General Orders 95 (GO-95) or National Electric Safety Code (NESC), Title 8 of the California Code and Regulations, Articles 35, 36 and 37 of the "High Voltage Electric Safety Orders", National Electric Code (NEC) and related industry standards.
 - b) Breakers and buses in the power plant switchyard and other switchyards, where applicable, shall be sized to comply with a short-circuit analysis.
 - c) Outlet line crossings and line parallels with transmission and distribution facilities shall be coordinated with the transmission line owner and comply with the owner's standards.
 - d) Termination facilities shall comply with applicable interconnection standards.
 - e) The project conductors shall be sized to accommodate the full output from the project.
 - f) The project owner shall provide:
 - Any modified Detailed Facility Study (DFS) including a description of facility upgrades, operational mitigation measures, and/or Remedial Action Scheme (RAS) or Special Protection System (SPS) sequencing and timing if applicable,
 - II. The executed Facility Interconnection Agreement with SCE.

<u>Verification:</u> At least <u>60-30</u> days prior to the start of grading of the power plant switchyard or transmission facilities, the project owner shall submit to the CPM for approval:

Electrical one line diagrams signed and sealed by a registered professional electrical engineer in responsible charge (or other approval acceptable to the CPM), a route map, and an engineering description of equipment and the configurations covered by the requirements 1a) through 1f) above.

The Detailed Facilities Study including a description of facility upgrades, operational mitigation measures and/or RAS or SPS, and the Utility Interconnection Agreement and the Cal-ISO Participating Generator Agreement (if either one are not otherwise provided to the Commission previously). Substitution of equipment and substation configurations shall be identified and justified by the project owner for CPM approval.

TSE-2 The project owner shall inform the CPM of any impending changes that may not conform to the requirements 1a) through 1f) of TSE-1, and have not received CPM approval, and request approval to implement such changes. A detailed description of the proposed change and complete engineering, environmental, and economic rationale for the change shall accompany the request. Construction involving changed equipment or substation configurations shall not begin without prior written approval of the changes by the CPM.

<u>Verification:</u> At least <u>60_30</u> days prior to the construction of the power plant switchyard and transmission facilities, the project owner shall inform the CPM of any impending changes that may not conform to requirements 1a) through 1f) of **TSE-1** and request approval to implement such changes.

TSE-3 The project owner shall be responsible for the inspection of the transmission facilities during project construction, and any subsequent CPM approved changes thereto, to ensure conformance with CPUC GO-95 or NESC, Title 8 of the California Code of Regulations, Articles 35, 36 and 37 of the "High Voltage Electric Safety Orders", SCE's interconnection standards, NEC, related industry standards and these conditions. In case of non-conformance, the project owner shall inform the CPM in writing, within 10 days of discovering such non-conformance and describe the corrective actions to be taken.

<u>Verification:</u> Within 60 days after first synchronization of the project to the grid, the project owner shall transmit to the CPM an engineering description(s) and one-line diagrams of the "as built" facilities signed and sealed by the registered electrical engineer in responsible charge (or other verification acceptable to the CPM, such as a letter stating that the attached diagrams have been verified by the engineer). A statement attesting to conformance with CPUC GO-95 or NESC, Title 8 of the California Code of Regulations, Articles 35, 36 and 37 of the "High Voltage Electric Safety Orders", SCE's interconnection standards, NEC, related industry standards and these conditions.

- TSE-4 The project owner shall provide the following Notice to the California Independent System Operator (Cal-ISO) prior to synchronizing the facility with the California Transmission system:
 - At least one week prior to synchronizing the facility with the grid for testing, provide the Cal-ISO a letter stating the proposed date of synchronization; and

2. At least one business day prior to synchronizing the facility with the grid for testing, provide telephone notification to the ISO Outage Coordination Department.

<u>Verification:</u> The project owner shall provide copies of the Cal-ISO letter to the CPM when it is sent to the Cal-ISO one week prior to initial synchronization with the grid. The project owner shall contact the Cal-ISO Outage Coordination Department, Monday through Friday, between the hours of 0700 and 1530 at (916) 351-2300 at least one business day prior to synchronizing the facility with the grid for testing. A report of conversation with the Cal-ISO shall be provided electronically to the CPM one day before synchronizing the facility with the California transmission system for the first time.

GENERAL CONDITIONS OF CERTIFICATION

Staff agrees to the following changes to the Conditions of Certification:

DEFINITIONS

To ensure consistency, continuity and efficiency, the following terms, as defined, apply to all technical areas, including Conditions of Certification:

Site Mobilization

Moving trailers and related equipment onto the site, usually accompanied by minor ground disturbance, grading for the trailers and limited vehicle parking, trenching for construction utilities, installing utilities, grading for an access corridor, and other related activities. Ground disturbance, grading, etc. for site mobilization are limited to the portion of the site necessary for placing the trailers and providing access and parking for the occupants. Site mobilization is for temporary facilities and is, therefore, not considered construction.

Ground Disturbance

Onsite activity that results in the removal of soil or vegetation, boring, trenching or alteration of the site surface. This does not include driving or parking a passenger vehicle, pickup truck, or other light vehicle, or walking on the site. Ground disturbance does not include the following:

- a. the installation of environmental monitoring equipment;
- b. a soil or geological investigation;
- c. a topographical survey;
- d. any other study or investigation to determine the environmental acceptability or feasibility of the use of the site for any particular facility; or
- e. any work to provide access to the site for any of the purposes specified in a., b., c., or d.

Grading

Onsite activity conducted with earth-moving equipment that results in alteration of the topographical features of the site such as leveling, removal of hills or high spots, or moving of soil from one area to another.

Construction

[From section 25105 of the Warren-Alquist Act.] Onsite work to install permanent equipment or structures for any facility. Construction does **not** include the following:

- a. the installation of environmental monitoring equipment;
- b. a soil or geological investigation;
- c. a topographical survey;
- d. any other study or investigation to determine the environmental acceptability or feasibility of the use of the site for any particular facility; or
- e. any work to provide access to the site for any of the purposes specified in a., b., c., or d.

Start Of Commercial Operation

For compliance monitoring purposes, "commercial operation" is that phase of project development which begins after the completion of start-up and commissioning, where the power plant has reached steady-state production of electricity with reliability at the rated capacity. For example, at the start of commercial operation, plant control is usually transferred from the construction manager to the plant operations manager.

COMPLIANCE PROJECT MANAGER RESPONSIBILITIES

A Compliance Project Manager (CPM) will oversee the compliance monitoring and shall be responsible for:

- ensuring that the design, construction, operation, and closure of the project facilities are in compliance with the terms and conditions of the Energy Commission Decision;
- 2. resolving complaints;
- 3. processing post-certification changes to the conditions of certification, project description, and ownership or operational control;
- 4. documenting and tracking compliance filings; and
- 5. ensuring that the compliance files are maintained and accessible.

The CPM is the contact person for the Energy Commission and will consult with appropriate responsible agencies and the Energy Commission when handling disputes, complaints and amendments.

All project compliance submittals are submitted to the CPM for processing. Where a submittal required by a condition of certification requires CPM approval the approval will involve all appropriate staff and management.

The Energy Commission has established a toll free compliance telephone number of **1-800-858-0784** for the public to contact the Energy Commission about power plant construction or operation-related questions, complaints or concerns.

Pre-Construction and Pre-Operation Compliance Meeting

The CPM may schedule pre-construction and pre-operation compliance meetings prior to the projected start-dates of construction, plant operation, or both. The purpose of these meetings will be to assemble both the Energy Commission's and the project owner's technical staff to review the status of all pre-construction or pre-operation requirements contained in the Energy Commission's conditions of certification to confirm that they have been met, or if they have not been met, to ensure that the proper action is taken. In addition, these meetings shall ensure, to the extent possible, that Energy Commission conditions will not delay the construction and operation of the plant due to oversight and to preclude any last minute, unforeseen issues from arising. Preconstruction meetings held during the certification process must be publicly noticed unless they are confined to administrative issues and processes.

Energy Commission Record

The Energy Commission shall maintain as a public record, in either the Compliance file or Docket file, for the life of the project (or other period as required):

- all documents demonstrating compliance with any legal requirements relating to the construction and operation of the facility;
- all monthly and annual compliance reports filed by the project owner;
- all complaints of noncompliance filed with the Energy Commission; and
- all petitions for project or condition changes and the resulting staff or Energy Commission action.

PROJECT OWNER RESPONSIBILITIES

It is the responsibility of the project owner to ensure that the general compliance conditions and the conditions of certification are satisfied. The general compliance conditions regarding post-certification changes specify measures that the project owner must take when requesting changes in the project design, compliance conditions, or ownership. Failure to comply with any of the conditions of certification or the general compliance conditions may result in reopening of the case and revocation of Energy Commission certification, an administrative fine, or other action as appropriate. A summary of the General Conditions of Certification is included as **Compliance Table 1** at the conclusion of this section. The designation after each of the following summaries of the General Compliance Conditions (**COM-1**, **COM-2**, etc.) refers to the specific General Compliance Condition contained in **Compliance Table 1**.

COM-1, Unrestricted Access

The CPM, responsible Energy Commission staff, and delegate agencies or consultants, shall be guaranteed and granted unrestricted access to the power plant site, related

facilities, project-related staff, and the files and records maintained on site, for the purpose of conducting audits, surveys, inspections, or general site visits. Although the CPM will normally schedule site visits on dates and times agreeable to the project owner, the CPM reserves the right to make unannounced visits at any time.

COM-2, Compliance Record

The project owner shall maintain project files onsite, or at an alternative site approved by the CPM, for the life of the project unless a lesser period of time is specified by the conditions of certification. The files shall contain copies of all "as-built" drawings, all documents submitted as verification for conditions, and all other project-related documents.

COM-3, Compliance Verification Submittals

Each condition of certification is followed by a means of verification. The verification describes the Energy Commission's procedure(s) to ensure post-certification compliance with adopted conditions.

Verification of compliance with the conditions of certification can be accomplished by:

- reporting on the work done and providing the pertinent documentation in monthly and/or annual compliance reports filed by the project owner or authorized agent as required by the specific conditions of certification;
- 2. providing appropriate letters from delegate agencies verifying compliance;
- 3. Energy Commission staff audits of project records; and/or
- 4. Energy Commission staff inspections of mitigation or other evidence of mitigation.

A cover letter from the project owner or authorized agent is required for all compliance submittals and correspondence pertaining to compliance matters. The cover letter subject line shall identify the involved condition(s) of certification by condition number and include a brief description of the subject of the submittal. The project owner shall also identify those submittals not required by a condition of certification with a statement such as: "This submittal is for information only and is not required by a specific condition of certification." When submitting supplementary or corrected information, the project owner shall reference the date of the previous submittal.

The project owner is responsible for the delivery and content of all verification submittals to the CPM, whether such condition was satisfied by work performed by the project owner or an agent of the project owner.

All submittals shall be addressed as follows:

Compliance Project Manager Docket Number California Energy Commission 1516 Ninth Street (MS-2000) Sacramento, CA 95814 If the project owner desires Energy Commission staff action by a specific date, they shall so state in their submittal and include a detailed explanation of the effects on the project if this date is not met.

COM-4, Pre-Construction Matrix And Tasks Prior To Start Of Construction

Prior to commencing construction a compliance matrix addressing <u>only</u> those conditions that must be fulfilled before the start of construction shall be submitted by the project owner to the CPM. This matrix will be included with the project owner's **first** compliance submittal, and shall be submitted prior to the first pre-construction meeting, if one is held. It will be in the same format as the compliance matrix referenced below. Construction shall not commence until the pre-construction matrix is submitted, all pre-construction conditions have been complied with, and the CPM has issued a letter to the project owner authorizing construction. Various lead times (e.g., 30, 60, 90 days) for submittal of compliance verification documents to the CPM for conditions of certification are established to allow sufficient staff time to review and comment and, if necessary, allow the project owner to revise the submittal in a timely manner. This will ensure that project construction may proceed according to schedule.

Failure to submit compliance documents within the specified lead-time may result in delays in authorization to commence various stages of project construction.

Verification lead times (e.g., 90, 60 and 30-days) associated with start of construction may require the project owner to file submittals during the certification process, particularly if construction is planned to commence shortly after certification. It is important that the project owner understand that the submittal of compliance documents prior to project certification is at the owner's own risk. Any approval by Energy Commission staff is subject to change based upon the Final Decision

COMPLIANCE REPORTING

There are two different compliance reports that the project owner must submit to assist the CPM in tracking activities and monitoring compliance with the terms and conditions of the Commission Decision. During construction, the project owner or authorized agent will submit Monthly Compliance Reports. During operation, an Annual Compliance Report must be submitted. These reports, and the requirement for an accompanying compliance matrix, are described below. The majority of the conditions of certification require that compliance submittals be submitted to the CPM in the monthly or annual compliance reports.

COM-5, Compliance Matrix

A compliance matrix shall be submitted by the project owner to the CPM along with each monthly and annual compliance report. The compliance matrix is intended to provide the CPM with the current status of all compliance conditions in a spreadsheet format. The compliance matrix must identify:

- 1. the technical area:
- 2. the condition number:

- 3. a brief description of the verification action or submittal required by the condition;
- 4. the date the submittal is required (e.g., 60 days prior to construction, after final inspection, etc.);
- 5. the expected or actual submittal date;
- 6. the date a submittal or action was approved by the Chief Building Official (CBO), CPM, or delegate agency, if applicable;
- 7. the compliance status of each condition (e.g., "not started," "in progress" or "completed" (include the date); and
- 8. the project's preconstruction and construction milestones, including dates and status (if milestones are required).

Satisfied conditions do not need to be included in the compliance matrix after they have been identified as satisfied in at least one monthly or annual compliance report.

COM-6, Monthly Compliance Report

The first Monthly Compliance Report is due one month following the Energy Commission business meeting date on which the project was approved, unless otherwise agreed to by the CPM. The first Monthly Compliance Report shall include an initial list of dates for each of the events identified on the **Key Events List. The Key Events List form is found at the end of this section.**

During pre-construction and construction of the project, the project owner or authorized agent shall submit an original and five copies (or <u>other</u> amount specified by Compliance Project Manager) of the Monthly Compliance Report within 10 working days after the end of each reporting month. Monthly Compliance Reports shall be clearly identified for the month being reported. The reports shall contain, at a minimum:

- 1. a summary of the current project construction status, a revised/updated schedule if there are significant delays, and an explanation of any significant changes to the schedule:
- 2. documents required by specific conditions to be submitted along with the Monthly Compliance Report. Each of these items must be identified in the transmittal letter, and should be submitted as attachments to the Monthly Compliance Report;
- 3. an initial, and thereafter updated, compliance matrix which shows the status of all conditions of certification;
- 4. a list of conditions that have been satisfied during the reporting period, and a description or reference to the actions which satisfied the condition;
- 5. a list of any submittal deadlines that were missed accompanied by an explanation and an estimate of when the information will be provided;
- 6. a cumulative listing of any approved changes to conditions of certification;
- 7. a listing of any filings with, or permits issued by, other governmental agencies during the month;

- 8. a projection of project compliance activities scheduled during the next two months. The project owner shall notify the CPM as soon as any changes are made to the project construction schedule that would affect compliance with conditions of certification;
- 9. a listing of the month's additions to the on-site compliance file;
- 10. any requests, with justification, to dispose of items that are required to be maintained in the project owner's compliance file; and
- 11. a listing of complaints, notices of violation, official warnings, and citations received during the month, a description of the resolutions of any resolved complaints, and the status of any unresolved complaints.

COM-7, Annual Compliance Report

After construction is complete, the project owner shall submit Annual Compliance Reports instead of Monthly Compliance Reports. The reports are for each year of commercial operation and are due to the CPM each year at a date agreed to by the CPM. Annual Compliance Reports shall be submitted over the life of the project unless otherwise specified by the CPM. Each Annual Compliance Report shall identify the reporting period and shall contain the following:

- an updated compliance matrix which shows the status of all conditions of certification (fully satisfied and/or closed conditions do not need to be included in the matrix after they have been reported as closed);
- 2. a summary of the current project operating status and an explanation of any significant changes to facility operations during the year;
- 3. documents required by specific conditions to be submitted along with the Annual Compliance Report. Each of these items must be identified in the transmittal letter, and should be submitted as attachments to the Annual Compliance Report;
- 4. a cumulative listing of all post-certification changes approved by the Energy Commission or cleared by the CPM;
- 5. an explanation for any submittal deadlines that were missed, accompanied by an estimate of when the information will be provided;
- 6. a listing of filings made to, or permits issued by, other governmental agencies during the year;
- 7. a projection of project compliance activities scheduled during the next year;
- 8. a listing of the year's additions to the on-site compliance file;
- 9. an evaluation of the on-site contingency plan for unplanned facility closure, including any suggestions necessary for bringing the plan up to date [see General Conditions for Facility Closure addressed later in this section]; and
- 10. a listing of complaints, notices of violation, official warnings, and citations received during the year, a description of the resolution of any resolved complaints, and the status of any unresolved complaints.

COM-8, Construction and Operation Security Plan

Thirty days prior to commencing construction, a site-specific Security Plan for the construction phase shall be developed and maintained at the project site. At least 60 days prior to the initial receipt of hazardous materials on-site, a site-specific Security Plan and Vulnerability Assessment for the operational phase shall be developed and maintained at the project site. The project owner shall notify the CPM in writing that the Plan is available for review and approval at the project site.

Construction Security Plan

The Construction Security Plan must address:

- 1. site fencing enclosing the construction area;
- 2. use of security guards;
- 3. check-in procedure or tag system for construction personnel and visitors;
- 4. protocol for contacting law enforcement and the CPM in the event of suspicious activity or emergency; and
- 5. evacuation procedures.

Operation Security Plan

The Operations Security Plan must address:

- permanent site fencing and security gate;
- 2. use of security guards;
- security alarm for critical structures;
- 4. protocol for contacting law enforcement and the CPM in the event of suspicious activity or emergency;
- 5. evacuation procedures;
- 6. perimeter breach detectors and on-site motion detectors;
- video or still camera monitoring system;
- 8. fire alarm monitoring system;
- 9. site personnel background checks; and.
- 10. site access for vendors and requirements for hazardous materials vendors to conduct personnel background security checks.

In addition, the project owner shall prepare a Vulnerability Assessment and implement site security measures addressing hazardous materials storage and transportation consistent with US EPA and US Department of Justice guidelines.

The CPM may authorize modifications to these measures, or may require additional measures depending on circumstances unique to the facility, and in response to industry-related security concerns.

However, the language requirements of COM-8 will be subject to replacement or termination pursuant to the Commission's future rulemaking or other action on security that will promulgate guidelines applicable to projects under the jurisdiction of the Energy Commission.

COM-9, Confidential Information

Any information that the project owner deems confidential shall be submitted to the Energy Commission's Docket with an application for confidentiality pursuant to Title 20, California Code of Regulations, section 2505(a). Any information, that is determined to be confidential shall be kept confidential as provided for in Title 20, California Code of Regulations, section 2501 et. seq.

COM-10, Department of Fish and Game Filing Fee

Pursuant to the provisions of Fish and Game Code Section 711.4, the project owner shall pay a filing fee in the amount of \$850. The payment instrument shall be provided to the Energy Commission's Project Manager (PM), not the CPM, at the time of project certification and shall be made payable to the California Department of Fish and Game. The PM will submit the payment to the Office of Planning and Research at the time of filing of the notice of decision pursuant to Public Resources Code Section 21080.5.

COM-11, Reporting of Complaints, Notices, and Citations

Prior to the start of construction, the project owner must send a letter to property owners living within one mile of the project notifying them of a telephone number to contact project representatives with questions, complaints or concerns. If the telephone is not staffed 24 hours per day, it shall include automatic answering with date and time stamp recording. All recorded inquiries shall be responded to within 24 hours. The telephone number shall be posted at the project site and made easily visible to passersby during construction and operation. The telephone number shall be provided to the CPM who will post it on the Energy Commission's web page at:

http://www.energy.ca.gov/sitingcases/power_plants_contacts.html

Any changes to the telephone number shall be submitted immediately to the CPM who will update the web page.

In addition to the monthly and annual compliance reporting requirements described above, the project owner shall report and provide copies of all complaint forms, notices of violation, notices of fines, official warnings, and citations, within 10 days of receipt, to the CPM. Complaints shall be logged and numbered. Noise complaints shall be recorded on the form provided in the **NOISE** conditions of certification. All other complaints shall be recorded on the complaint form (Attachment A).

FACILITY CLOSURE

At some point in the future, the project will cease operation and close down. At that time, it will be necessary to ensure that the closure occurs in such a way that public

health and safety and the environment are protected from adverse impacts. Although the project setting for this project does not appear, at this time, to present any special or unusual closure problems, it is impossible to foresee what the situation will be in 30 years or more when the project ceases operation. Therefore, provisions must be made that provide the flexibility to deal with the specific situation and project setting that exist at the time of closure. Laws, Ordinances, Regulations and Standards (LORS) pertaining to facility closure are identified in the sections dealing with each technical area. Facility closure will be consistent with LORS in effect at the time of closure.

There are at least three circumstances in which a facility closure can take place, planned closure, unplanned temporary closure and unplanned permanent closure.

CLOSURE DEFINITIONS

Planned Closure

A planned closure occurs at the end of a project's life, when the facility is closed in an anticipated, orderly manner, at the end of its useful economic or mechanical life, or due to gradual obsolescence.

<u>Unplanned Temporary Closure</u>

An unplanned temporary closure occurs when the facility is closed suddenly and/or unexpectedly, on a short-term basis, due to unforeseen circumstances such as a natural disaster or an emergency.

<u>Unplanned Permanent Closure</u>

An unplanned permanent closure occurs if the project owner closes the facility suddenly and/or unexpectedly, on a permanent basis. This includes unplanned closure where the owner remains accountable for implementing the on-site contingency plan. It can also include unplanned closure where the project owner is unable to implement the contingency plan, and the project is essentially abandoned.

GENERAL CONDITIONS FOR FACILITY CLOSURE

COM-12, Planned Closure

In order to ensure that a planned facility closure does not create adverse impacts, a closure process that provides for careful consideration of available options and applicable laws, ordinances, regulations, standards, and local/regional plans in existence at the time of closure, will be undertaken. To ensure adequate review of a planned project closure, the project owner shall submit a proposed facility closure plan to the Energy Commission for review and approval at least twelve months prior to commencement of closure activities (or other period of time agreed to by the CPM). The project owner shall file 120 copies (or other number of copies agreed upon by the CPM) of a proposed facility closure plan with the Energy Commission.

The plan shall:

- 1. identify and discuss any impacts and mitigation to address significant adverse impacts associated with proposed closure activities and to address facilities, equipment, or other project related remnants that will remain at the site;
- 2. identify a schedule of activities for closure of the power plant site, transmission line corridor, and all other appurtenant facilities constructed as part of the project;
- 3. identify any facilities or equipment intended to remain on site after closure, the reason, and any future use; and
- 4. address conformance of the plan with all applicable laws, ordinances, regulations, standards, local/regional plans in existence at the time of facility closure, and applicable conditions of certification.

In the event that there are significant issues associated with the proposed facility closure plan's approval, or the desires of local officials or interested parties are inconsistent with the plan, the CPM shall hold one or more workshops and/or the Energy Commission may hold public hearings as part of its approval procedure.

In addition, prior to submittal of the proposed facility closure plan, a meeting shall be held between the project owner and the Energy Commission CPM for the purpose of discussing the specific contents of the plan.

As necessary, prior to or during the closure plan process, the project owner shall take appropriate steps to eliminate any immediate threats to public health and safety and the environment, but shall not commence any other closure activities, until Energy Commission approval of the facility closure plan is obtained.

COM-13, Unplanned Temporary Closure/On-Site Contingency Plan

In order to ensure that public health and safety and the environment are protected in the event of an unplanned temporary facility closure, it is essential to have an on-site contingency plan in place. The on-site contingency plan will help to ensure that all necessary steps to mitigate public health and safety impacts and environmental impacts are taken in a timely manner.

The project owner shall submit an on-site contingency plan for CPM review and approval. The plan shall be submitted no less that 60 days (or other time agreed to by the CPM) prior to commencement of commercial operation. The approved plan must be in place prior to commercial operation of the facility and shall be kept at the site at all times.

The project owner, in consultation with the CPM, will update the on-site contingency plan as necessary. The CPM may require revisions to the on-site contingency plan over the life of the project. In the annual compliance reports submitted to the Energy Commission, the project owner will review the on-site contingency plan, and recommend changes to bring the plan up to date. Any changes to the plan must be approved by the CPM.

The on-site contingency plan shall provide for taking immediate steps to secure the facility from trespassing or encroachment. In addition, for closures of more than 90 days, unless other arrangements are agreed to by the CPM, the plan shall provide for removal of hazardous materials and hazardous wastes, draining of all chemicals from storage tanks and other equipment and the safe shutdown of all equipment. (Also see specific conditions of certification for the technical areas of Hazardous Materials Management and Waste Management.)

In addition, consistent with requirements under unplanned permanent closure addressed below, the nature and extent of insurance coverage, and major equipment warranties must also be included in the on-site contingency plan. In addition, the status of the insurance coverage and major equipment warranties must be updated in the annual compliance reports.

In the event of an unplanned temporary closure, the project owner shall notify the CPM, as well as other responsible agencies, by telephone, fax, or e-mail, within 24 hours and shall take all necessary steps to implement the on-site contingency plan. The project owner shall keep the CPM informed of the circumstances and expected duration of the closure.

If the CPM determines that an unplanned temporary closure is likely to be permanent, or for a duration of more than twelve months, a closure plan consistent with the requirements for a planned closure shall be developed and submitted to the CPM within 90 days of the CPM's determination (or other period of time agreed to by the CPM).

COM-14, Unplanned Permanent Closure/On-Site Contingency Plan

The on-site contingency plan required for unplanned temporary closure shall also cover unplanned permanent facility closure. All of the requirements specified for unplanned temporary closure shall also apply to unplanned permanent closure.

In addition, the on-site contingency plan shall address how the project owner will ensure that all required closure steps will be successfully undertaken in the unlikely event of abandonment.

In the event of an unplanned permanent closure, the project owner shall notify the CPM, as well as other responsible agencies, by telephone, fax, or e-mail, within 24 hours and shall take all necessary steps to implement the on-site contingency plan. The project owner shall keep the CPM informed of the status of all closure activities.

A closure plan, consistent with the requirements for a planned closure, shall be developed and submitted to the CPM within 90 days of the permanent closure or another period of time agreed to by the CPM.

CBO DELEGATION AND AGENCY COOPERATION

In performing construction monitoring of the project, Commission staff acts as, and has the authority of, the Chief Building Official (CBO). Commission staff may delegate CBO

responsibility to either an independent third party contractor or the local building official. Commission staff retains CBO authority when selecting a delegate CBO including enforcing and interpreting state and local codes, and use of discretion, as necessary, in implementing the various codes and standards.

Commission staff may also seek the cooperation of state, regional and local agencies that have an interest in environmental control when conducting project monitoring.

ENFORCEMENT

The Energy Commission's legal authority to enforce the terms and conditions of its Decision is specified in Public Resources Code sections 25534 and 25900. The Energy Commission may amend or revoke the certification for any facility, and may impose a civil penalty for any significant failure to comply with the terms or conditions of the Energy Commission Decision. The specific action and amount of any fines the Energy Commission may impose would take into account the specific circumstances of the incident(s). This would include such factors as the previous compliance history, whether the cause of the incident involves willful disregard of LORS, oversight, unforeseeable events, and other factors the Energy Commission may consider. Moreover, to ensure compliance with the terms and conditions of certification and applicable LORS, delegate agencies are authorized to take any action allowed by law in accordance with their statutory authority, regulations, and administrative procedures.

NONCOMPLIANCE COMPLAINT PROCEDURES

Any person or agency may file a complaint alleging noncompliance with the conditions of certification. Such a complaint will be subject to review by the Energy Commission pursuant to Title 20, California Code of Regulations, section 1230 et seq., but in many instances the noncompliance can be resolved by using the informal dispute resolution process. Both the informal and formal complaint procedure, as described in current State law and regulations, are described below. They shall be followed unless superseded by current law or regulations.

<u>Informal Dispute Resolution Procedure</u>

The following procedure is designed to informally resolve disputes concerning the interpretation of compliance with the requirements of this compliance plan. The project owner, the Energy Commission, or any other party, including members of the public, may initiate this procedure for resolving a dispute. Disputes may pertain to actions or decisions made by any party including the Energy Commission's delegate agents.

This procedure may precede the more formal complaint and investigation procedure specified in Title 20, California Code of Regulations, section 1230 et seq., but is not intended to be a substitute for, or prerequisite to it. This informal procedure may not be used to change the terms and conditions of certification as approved by the Energy Commission, although the agreed upon resolution may result in a project owner, or in some cases the Energy Commission staff, proposing an amendment.

The procedure encourages all parties involved in a dispute to discuss the matter and to reach an agreement resolving the dispute. If a dispute cannot be resolved, then the matter must be referred to the full Energy Commission for consideration via the complaint and investigation process. The procedure for informal dispute resolution is as follows:

Request for Informal Investigation

Any individual, group, or agency may request that the Energy Commission conduct an informal investigation of alleged noncompliance with the Energy Commission's terms and conditions of certification. All requests for informal investigations shall be made to the designated CPM.

Upon receipt of a request for informal investigation, the CPM shall promptly notify the project owner of the allegation by telephone and letter. All known and relevant information of the alleged noncompliance shall be provided to the project owner and to the Energy Commission staff. The CPM will evaluate the request and the information to determine if further investigation is necessary. If the CPM finds that further investigation is necessary, the project owner will be asked to promptly investigate the matter and, within seven working days of the CPM's request, provide a written report of the results of the investigation, including corrective measures proposed or undertaken, to the CPM. Depending on the urgency of the noncompliance matter, the CPM may conduct a site visit and/or request the project owner to provide an initial report, within 48 hours, followed by a written report filed within seven days.

Request for Informal Meeting

In the event that either the party requesting an investigation or the Energy Commission staff is not satisfied with the project owner's report, investigation of the event, or corrective measures undertaken, either party may submit a written request to the CPM for a meeting with the project owner. Such request shall be made within 14 days of the project owner's filing of its written report. Upon receipt of such a request, the CPM shall:

- 1. immediately schedule a meeting with the requesting party and the project owner, to be held at a mutually convenient time and place;
- 2. secure the attendance of appropriate Energy Commission staff and staff of any other agencies with expertise in the subject area of concern, as necessary;
- 3. conduct such meeting in an informal and objective manner so as to encourage the voluntary settlement of the dispute in a fair and equitable manner; and
- 4. after the conclusion of such a meeting, promptly prepare and distribute copies to all in attendance and to the project file, a summary memorandum which fairly and accurately identifies the positions of all parties and any conclusions reached. If an agreement has not been reached, the CPM shall inform the complainant of the formal complaint process and requirements provided under Title 20, California Code of Regulations, section 1230 et seq.

Formal Dispute Resolution Procedure-Complaints and Investigations

If either the project owner, Energy Commission staff, or the party requesting an investigation is not satisfied with the results of the informal dispute resolution process, such party may file a complaint or a request for an investigation with the Energy Commission's General Counsel. Disputes may pertain to actions or decisions made by any party including the Energy Commission's delegate agents. Requirements for complaint filings and a description of how complaints are processed are in Title 20, California Code of Regulations, section 1230 et seq.

The Chairman, upon receipt of a written request stating the basis of the dispute, may grant a hearing on the matter, consistent with the requirements of noticing provisions. The Energy Commission shall have the authority to consider all relevant facts involved and make any appropriate orders consistent with its jurisdiction (Cal. Code Regs., tit. 20, §§ 1232-1236).

POST CERTIFICATION CHANGES TO THE ENERGY COMMISSION DECISION: AMENDMENTS, INSIGNIFICANT PROJECT CHANGES, AND VERIFICATION CHANGES

The project owner shall petition the Energy Commission, pursuant to Title 20, California Code of Regulations, section 1769, when proposing modifications to project design, operation, or performance requirements. The petition requesting the modification should be submitted to the Energy Commission's Docket in accordance with Title 20, California Code of Regulations, section 1209.

AMENDMENTS

If a proposed modification results in 1) a change or deletion of a condition of certification, 2) a significant effect on the environment, or 3) causes the project not to comply with applicable LORS, the petition shall be processed as a formal amendment to the final decision. The full Commission must approve formal amendments. The project owner shall file a petition in accordance with Title 20, California Code of Regulations, section 1769 (a).

Change of ownership or operational control also requires that the project owner files a petition, and obtains full Commission approval, pursuant to section 1769 (b).

Insignificant Project Changes

If staff determines that a proposed modification <u>will not</u> result in 1) a change or deletion to a condition of certification, 2) have a significant effect on the environment, and 3) complies with all applicable LORS, then commission approval is <u>not</u> needed pursuant to section 1769 (a) (2). The CPM shall file a statement that staff has made such a determination with the Commission Docket and mail a copy of the statement to every person on the project's post-certification mailing list.

Any person may file an objection to staff's determination within 14 days of service on the grounds that the modification does not meet the criteria in section 1769 (a) (2). If an

objection is received, the petition must be processed as a formal amendment to the final decision and must be approved by the full Commission at a noticed business meeting or hearing.

VERIFICATION CHANGES

Pursuant to section 1769 (d), verification provisions may also be modified as necessary to enforce the conditions of certification without requesting an amendment to the final decision, provided that the verification change does not conflict with the condition of certification. The staff may initiate verification changes, or the project owner may request changes.

COM-15, CONSTRUCTION MILESTONES

Should the project owner use Priority Reserve emission reduction credits for the project, The following is the procedure for establishing and enforcing milestones, which include milestone dates for pre-construction and construction phases of the project. If Priority Reserve emission credits are used, Mmilestones and method of verification, must be established and agreed upon by the project owner and the CPM no later than 360 days after project approval, the date of docketing. If this deadline is not met, the CPM will establish the milestones.

- I. ESTABLISH PRE-CONSTRUCTION AND CONSTRUCTION MILESTONES TO ENABLE COMPLETION OF CONSTRUCTION IN COMPLIANCE WITH SCAQMD'S THREE YEAR "START OF OPERATION" REQUIREMENTS, CONTAINED IN RULE 1309.1.
 - 1. Obtain site control.
 - 2. Obtain financing.
 - Mobilize site.
 - 4. Begin rough grading for permanent structures (start of construction).
 - 5. Begin pouring major foundation concrete.
 - 6. Begin installation of major equipment.
 - 7. Complete installation of major equipment.
 - 8. Begin gas pipeline construction.
 - 9. Complete gas pipeline interconnection.
 - 10. Begin T-line construction.
 - 11. Complete T-line interconnection.
 - 12. Begin commercial operation within three years of the Commission's final decision.

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The CPM will negotiate the above-cited pre-construction and construction milestones with the project owner based on an expected schedule of construction. The CPM may agree to modify the final milestones from those listed above at any

time prior to or during construction if the project owner demonstrates good-cause for not meeting the originally-established milestones. Otherwise, failure to meet milestone dates without a finding of good cause is considered cause for possible forfeiture of certification or other penalties.

II. A FINDING THAT THERE IS GOOD CAUSE FOR FAILURE TO MEET MILESTONES WILL BE MADE IF ANY OF THE FOLLOWING CRITERIA ARE MET:

- 1. The change in any milestone does not change the established commercial operation date milestone.
- 2. The milestone will be missed due to circumstances beyond the project owner's control.
- 3. The milestone will be missed, but the project owner demonstrates a good-faith effort to meet the project milestone.
- 4. The milestone will be missed due to unforeseen natural disasters or acts of God which prevent timely completion of the milestones.
- 5. The milestone will be- missed due to requirements of the California ISO to maintain existing generation output.

If a milestone date cannot be met, the CPM will make a determination whether the project owner has demonstrated good cause for failure to meet the milestone. If the determination is that good cause exists, the CPM will negotiate revised milestones.

If the project owner fails to meet one or more of the established milestones, and the CPM determines that good cause does not exist, the CPM will make a recommendation to the Executive Director. Upon receiving such recommendation, the Executive Director will take one of the following actions:

- 1. Conclude that good cause exists and direct that revised milestones be established; or
- 2. Issue a reprimand, impose a fine, or take other appropriate remedial action and direct that revised milestones be established; or
- 3. Recommend, after consulting with the Siting Committee, that the Energy Commission issue a finding that the project owner has forfeited the project's certification.

The project owner has the right to appeal a finding of no good cause, or any recommended remedial action to the full Energy Commission.

COM-6, KEY EVENTS LIST

PROJECT: INLAND EMPIRE Power Project	
DOCKET #: 01-AFC-17	
COMPLIANCE PROJECT MANAGER:	

EVENT DESCRIPTION

DATE

Certification Date/Obtain Site Control					
Online Date					
POWER PLANT SITE ACTIVITIES					
Start Site Mobilization					
Start Ground Disturbance					
Start Grading					
Start Construction					
Begin Pouring Major Foundation Concrete					
Begin Installation of Major Equipment					
Completion of Installation of Major Equipment					
First Combustion of Gas Turbine					
Start Commercial Operation					
Complete All Construction					
TRANSMISSION LINE ACTIVITIES					
Start T/L Construction					
SYNCHRONIZATION WITH GRID AND INTERCONNECTION					
COMPLETE T/L CONSTRUCTION					
FUEL SUPPLY LINE ACTIVITIES					
Start Gas Pipeline Construction and Interconnection					
COMPLETE GAS PIPELINE CONSTRUCTION					
WATER SUPPLY LINE ACTIVITIES					
START WATER SUPPLY LINE CONSTRUCTION					
COMPLETE WATER SUPPLY LINE CONSTRUCTION					

TABLE 1 COMPLIANCE SECTION SUMMARY of GENERAL CONDITIONS OF CERTIFICATION

CONDITION NUMBER	PAGE	SUBJECT	DESCRIPTION
COM-1	4	Unrestricted Access	The project owner shall grant Energy Commission staff and delegate agencies or consultants unrestricted access to the power plant site.
COM-2	4	Compliance Record	The project owner shall maintain project files on- site. Energy Commission staff and delegate agencies shall be given unrestricted access to the files.
COM-3	4	Compliance Verification Submittals	The project owner is responsible for the delivery and content of all verification submittals to the CPM, whether the condition was satisfied by work performed by the project owner or his agent.
COM-4	5	Pre- construction Matrix and Tasks Prior to Start of Construction	Construction shall not commence until all of the following activities/submittals have been completed: property owners living within one mile of the project have been notified of a telephone number to contact for questions, complaints or concerns; a pre-construction matrix has been submitted identifying only those conditions that must be fulfilled before the start of construction; lipre-construction conditions have been complied with; and the CPM has issued a letter to the project owner authorizing construction.
COM-5	6	Compliance Matrix	The project owner shall submit a compliance matrix (in a spreadsheet format) with each monthly and annual compliance report which includes the status of all compliance conditions of certification.
COM-6	6	Monthly Compliance Report (including a Key Events List)	During construction, the project owner shall submit Monthly Compliance Reports (MCRs) which include specific information. The first MCR is due the month following the Commission business meeting date on which the project was approved and shall include an initial list of dates for each of the events identified on the Key Events List.

CONDITION NUMBER	PAGE #	SUBJECT	DESCRIPTION
COM-7	7	Annual Compliance Reports	After construction ends and throughout the life of the project, the project owner shall submit Annual Compliance Reports instead of Monthly Compliance Reports.
COM-8	8	Security Plans	Thirty days prior to commencing construction, the project owner shall submit a Security Plan for the construction phase. Sixty days prior to initial receipt of hazardous material on site, the project owner shall submit an Security Plan & Vulnerability Assessment for the operational phase.
COM-9	9	Confidential Information	Any information the project owner deems confidential shall be submitted to the Dockets Unit with an application for confidentiality.
COM-10	9	Dept of Fish and Game Filing Fee	The project owner shall pay a filing fee of \$850 at the time of project certification.
COM-11	9	Reporting of Complaints, Notices and Citations	Within 10 days of receipt, the project owner shall report to the CPM, all notices, complaints, and citations.
COM-12	10	Planned Facility Closure	The project owner shall submit a closure plan to the CPM at least twelve months prior to commencement of a planned closure.
COM-13	11	Unplanned Temporary Facility Closure	To ensure that public health and safety and the environment are protected in the event of an unplanned temporary closure, the project owner shall submit an on-site contingency plan no less than 60 days prior to commencement of commercial operation.
COM-14	12	Unplanned Permanent Facility Closure	To ensure that public health and safety and the environment are protected in the event of an unplanned permanent closure, the project owner shall submit an on-site contingency plan no less than 60 days prior to commencement of commercial operation.
COM-15	16	Construction milestones	The project owner shall establish specific performance milestones for pre-construction and construction phases of the project.